Beyond expectations: The effect of regulatory focus on consumer satisfaction

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A B S T R A C T

This paper examines the effect of regulatory focus on consumer satisfaction. In contrast to the disconfirmation of expectations model of satisfaction, we find that, although regulatory focus does affect consumers’ expectations, the effect on satisfaction cannot be explained by differences in those expectations. Instead, our results reveal a direct effect of consumers’ regulatory focus on satisfaction that is based on the conservative bias of prevention-focused consumers. Compared to promotion-focused consumers, prevention-focused consumers protect against making errors and demonstrate a conservative bias in their evaluations of satisfaction. The results of two experiments demonstrate this conservative bias, showing that, compared to promotion-focused consumers, prevention-focused consumers are less satisfied with positive outcomes and more satisfied with negative outcomes.

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1. Introduction

Marketers have traditionally described consumer decision making as a series of five progressive stages: need recognition, information search, evaluation of alternatives, purchase decision, and post-purchase processes (e.g., Grewal & Levy, 2010). In recent years, regulatory focus theory has extended our knowledge of consumer decision making by investigating the effect of promotion and prevention orientations on consumer information search (Pham & Chang, 2010), information processing (e.g., Aaker & Lee, 2001; Bosmans & Baumgartner, 2005; Kirmani & Zhu, 2007; Pham & Avnet, 2004), and choice (Briley & Wyer, 2002; Wang & Lee, 2006).

In the last twenty-five years, researchers have also learned a great deal about consumer satisfaction. For example, we know that satisfied customers are often of greater value because they tend to spend more money, exhibit higher levels of loyalty, and talk more favorably about a product to others (for a review see Vargo, Nagao, He, & Morgan, 2007). In addition, there has been a great deal of support for the disconfirmation of expectations model of satisfaction, which contends that consumers’ pre-purchase expectations are a key driver of their ultimate satisfaction (Bolton & Drew, 1991; Oliver, 1980, 1997; Parasuraman, Zeithaml, & Berry, 1994).

However, the literature is noticeably silent on how consumers’ regulatory focus affects satisfaction in the post-purchase stage of consumer decision making. The present paper takes a first step towards addressing this issue by examining the impact that promotion and prevention orientations have on consumer satisfaction. In contrast to the disconfirmation of expectations model of satisfaction, we contend that a consumer’s regulatory focus can have a direct effect on satisfaction that is independent of expectations. Specifically, based on the conservative bias of prevention-focused consumers, which has been demonstrated in prior research (Crowe & Higgins, 1997; Higgins, 2002), we predict that prevention-focused consumers will be more satisfied with a negative outcome and less satisfied with a positive outcome than promotion-focused consumers. In the following sections, we discuss the theoretical rationale for the impact of regulatory focus on satisfaction and present the method and results of two experimental studies that document this effect. The paper concludes with a discussion of the theoretical and practical implications of our findings.

2. Theory development

Higgins (1987) suggests that there are two fundamental goal classifications that dominate human behavior: ideals and oughts. Ideals refer to people’s hopes, wishes and aspirations (e.g., owning a sports car), whereas oughts refer to people’s obligations, duties and responsibilities (e.g., taking care of one’s family). Ideals and oughts are pursued using different self-regulatory systems. Ideals are pursued with...
the promotion system, while oughts are pursued using the prevention system (Higgins, 1997, 1998). Thus, regulatory focus theory suggests fundamental motivational differences in the goals that each system regulates (Higgins, 1997, 1998, 2002). Promotion-focused consumers are concerned with goals of growth and advancement, while prevention-focused consumers are concerned with goals of security and responsibility.

Promotion and prevention are also distinct in the types of strategies that these systems activate in the pursuit of goals (Higgins, 1997; Pham & Avnet, 2004). Promotion-focused consumers approach gains and avoid non-gains. Their goal pursuit is characterized by eagerness and a desire to approach accomplishments. In contrast, people with a prevention focus approach non-losses and avoid losses. Their goal pursuit is characterized by vigilance and a desire to avoid making mistakes. As a result, those with a prevention focus are more sensitive to losses. Therefore, relative to people who are promotion-focused, individuals with a prevention focus tend to exhibit a conservative bias in judgment and decision making (Crowe & Higgins, 1997; Higgins, 2002). This conservative bias was tested in a memory recognition task by Crowe and Higgins (1997) in which participants were presented with an initial list of 20 letter strings (non-sense words). Next participants were presented with a second list of 40 letter strings. Of the 40 letter strings, 20 of the letter strings were in the initial list, and 20 of the letter strings were new. Participants then responded as to whether they had previously seen the letter string. The results revealed that, compared with promotion-focused participants, prevention-focused participants protected against making mistakes, demonstrating a conservative bias by saying “no” (Crowe & Higgins, 1997).

Consumer research has documented the effects of promotion and prevention in a variety of different domains, including information search (Pham & Chang, 2010), information processing (e.g., Aaker & Lee, 2001; Bosmans & Baumgartner, 2005; Kirmani & Zhu, 2007; Pham & Avnet, 2004) and preference formation (Briere & Wyer, 2002; Wang & Lee, 2006). The research presented in this article contributes to this literature by demonstrating that consumers’ regulatory focus can also influence their satisfaction with a consumption experience. We contend that the conservative bias among people with a prevention focus, relative to those with a promotion focus, has important implications for consumer satisfaction. Specifically, a prevention focus should lead people to protect against making errors, resulting in more reserved and conservative evaluations. Therefore, we predict that, as compared to promotion-focused consumers, prevention-focused consumers will be less satisfied by positive outcomes and more satisfied by negative outcomes.

From the perspective of regulatory focus theory, this prediction is a relatively straightforward implication of the conservative bias that previous research has identified among people who are prevention-focused (Crowe & Higgins, 1997; Higgins, 2002). However, regulatory focus theory suggests a direct effect of regulatory focus on satisfaction that does not rely on the expectations that a consumer has for the consumption experience. This prediction is not easily accounted for by the well-established disconfirmation of expectations model (Oliver, 1980, 1997), which contends that satisfaction and dissatisfaction arise from a cognitive process whereby pre-purchase expectations are compared to the actual consumption experience. The result of this comparison leads to expectancy disconfirmation. Thus, regulatory focus theory suggests a direct effect of regulatory focus on satisfaction, which is consistent with the conservative bias of prevention-focused consumers that has been demonstrated in prior research (Crowe & Higgins, 1997; Higgins, 2002).

3. Experiment 1

3.1. Method

3.1.1. Participants and design

A total of 103 participants were randomly assigned to the conditions of a 2 (consumption experience: positive vs. negative) by 2 (regulatory focus: promotion vs. prevention) between-subjects design. Participants were selected from the subject pool of a large North American university; participants received partial course credit for their participation.

3.1.2. Procedure

The experiment was administered as two unrelated studies. In the first study, the participants completed a priming task. Following Pham and Avnet (2004), we used a priming procedure to manipulate participants’ regulatory focus. In the promotion condition, we used an ideals prime that required participants to think about their past hopes, aspirations and dreams and then to list two of them. Following this procedure, they were asked to think about their current hopes, aspirations and dreams and then to list two of them. In the prevention condition, we used an oughts prime, which required participants to think about their past duties, obligations and responsibilities and then to list two of them. They were then asked to think about their current duties, obligations and responsibilities and then to list two of them.

In the ostensibly unrelated second study, we measured participants’ satisfaction with a camera’s performance. All participants were provided with a scenario that asked them to choose between two cameras. The cameras were minor purchases in the scenarios and were not expensive ($39).

To establish a basis for expectations, participants were given an average consumer rating from an unbiased source. To induce consistent choice across participants, one camera was rated as objectively superior (the dominant choice among study participants), and the other was rated as objectively inferior (the dominated choice). In a pre-test, 100% of the participants selected the dominant camera. In the main study, five participants chose the inferior camera and, as a result, they were eliminated from the analysis. The final sample had a total of 98 participants.

Next, we measured participants’ expectations of the performance of the camera that they chose using 3 nine-point items anchored by “Average, like most snapshots” and “Excellent, like a professional print” (α = .94) (Spreng & Olshavsky, 1993). The items were (1) “What would be the level of picture quality you would expect from this camera?” (2) “What would be the clarity of picture quality you would expect from this camera?” (3) “What would be the sharpness of picture quality you would expect from this camera?”

The operationalization of positive versus negative product experience was consistent with previous satisfaction research (Spreng, MacKenzie, & Olshavsky, 1996; Voss, Parasuraman, & Grewal, 1998). All subjects viewed the same four pictures; however, the quality of the photos varied between conditions. In the positive product experience condition, the photos were of a consistently higher quality. In the negative product experience condition, clarity and sharpness were manipulated using photo software (Adobe Photoshop 7) to
produce photos that were of consistently poor quality. A pretest confirmed the efficacy of the positive and negative product experience manipulations in a between-subjects design. In the positive experience condition, the overall quality (M = 5.70), clarity (M = 6.40) and sharpness (M = 5.80) were all rated as significantly better than in the negative experience condition, where the overall quality (M = 2.30, F(1, 18) = 32.00, p<.001), photo clarity (M = 2.60, F(1, 18) = 24.61, p<.001), and sharpness (M = 2.70, F(1, 18) = 17.40, p<.001) were consistently lower.

3.1.3. Measures
Satisfaction was measured using three nine-point items anchored by “strongly agree/strongly disagree” or “satisfied/unsatisfied” (α = .97): (1) “Based on these sample photographs, I am satisfied with the camera I chose.” (2) “How satisfied are you with the quality of the photos?” and (3) “How satisfied are you with the performance of the camera?”

3.2. Results
3.2.1. Manipulation checks
As expected, the positive experience photos were rated as being significantly higher on overall picture quality (M = 7.09) than the negative experience photos (M = 3.25, F(1, 96) = 140.40, p<.001). The positive experience photos were rated higher on picture clarity (M = 6.67 vs. M = 2.93; F(1, 96) = 133.72, p<.001) and picture sharpness (M = 6.46 vs. M = 2.75; F(1, 96) = 112.32, p<.001) than the negative experience photos. Thus, the consumption experience manipulation worked as expected.

3.2.2. Expectations
All means, standard deviations, and correlations are presented in Table 1. A two way ANOVA revealed a marginally significant main effect of regulatory focus on expectations: promotion-focused individuals had higher expectations of the camera (M = 5.61) compared to prevention-focused individuals (M = 5.05, F(1, 94) = 3.61, p<.06). As expectations were measured prior to the consumption experience, there should not be an effect of the consumption experience on expectations. Indeed, neither the main effect of the consumption experience nor the regulatory focus by consumption experience interaction on expectations was statistically significant (ps > .20).

3.2.3. Satisfaction
The effect of the regulatory focus by consumption experience interaction on satisfaction was significant (F(1, 94) = 10.92, p = .001; Fig. 1). In the positive consumption experience condition, when the pictures were good, satisfaction with the camera was lower for participants in the prevention-focused condition (M = 6.89) than it was for participants in the promotion-focused condition (M = 7.81, F(1, 94) = 9.32, p<.03). In the negative experience condition, when the pictures were of poor quality, satisfaction with the camera was higher for participants with a prevention focus (M = 3.67) than for participants with a promotion focus (M = 2.54, F(1, 94) = 9.92, p = .02). As detailed in Table 1, expectations were not correlated with satisfaction.

3.3. Discussion
The results of Experiment 1 demonstrated clear differences in satisfaction between promotion-focused and prevention-focused consumers. Consistent with our theory, prevention-focused consumers were more conservative in their reported level of satisfaction. When the camera’s picture quality was high, prevention-focused consumers were less satisfied than promotion-focused consumers. When the camera’s picture quality was low, prevention-focused consumers were more satisfied than promotion-focused consumers. The results also revealed a marginally significant effect of regulatory focus on expectations; however, there is no correlation between expectations and satisfaction. This is inconsistent with the disconfirmation of expectations model, but it is consistent with our hypothesizing that the effect of regulatory focus on satisfaction is not driven by differences in expectations.

4. Experiment 2
Although participants in Experiment 1 evaluated real photographs, the camera purchase was only hypothetical. To heighten external validity, Experiment 2 was designed to replicate Experiment 1 using a different context in which participants actually consume either high- or low-quality coffee, after being exposed to the same regulatory focus manipulation used in Experiment 1.

4.1. Method
4.1.1. Participants and design
This study employed a 2 (consumption experience: positive vs. negative) by 2 (regulatory focus: promotion vs. prevention) between-subjects design. A total of 120 participants, selected from

Table 1
Mean expectation and satisfaction ratings and correlations by experiment condition.

<table>
<thead>
<tr>
<th></th>
<th>Promotion</th>
<th>Prevention</th>
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<tr>
<td></td>
<td>Positive experience</td>
<td>Negative experience</td>
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<tr>
<td>Study 1: Photos</td>
<td></td>
<td></td>
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<tr>
<td>Expectations</td>
<td>5.78 (1.39)</td>
<td>5.45 (1.62)</td>
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<tr>
<td>Satisfaction</td>
<td>7.81 (1.40)</td>
<td>2.54 (1.35)</td>
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<tr>
<td>Correlations:</td>
<td>.46 (p = .01)</td>
<td>.19 (p = .40)</td>
</tr>
<tr>
<td></td>
<td>expectations</td>
<td>satisfaction</td>
</tr>
<tr>
<td>Study 2: Coffee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expectations</td>
<td>6.51 (1.36)</td>
<td>7.04 (1.31)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>6.39 (1.23)</td>
<td>3.57 (1.78)</td>
</tr>
<tr>
<td>Correlations:</td>
<td>.05 (p = .29)</td>
<td>.07 (p = .70)</td>
</tr>
<tr>
<td></td>
<td>expectations</td>
<td>satisfaction</td>
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Note: Standard deviations are reported in parentheses for mean ratings.
the subject pool of a large North American university, were randomly assigned to the experimental conditions. The subjects received partial course credit for participation. They were told that they would evaluate a cup of coffee. To establish a basis for expectations, the participants were told that the coffee was a medium-priced, drip-brewed coffee.

The consumption experience was manipulated to be either positive (a hot cup of a premium coffee) or negative (a cup of very weak warm coffee to which baking soda was added). To ensure that our participants had experience with coffee and, therefore, were able to recognize a positive or negative consumption experience—a screening question asking “How much coffee do you drink daily?” was used during the recruitment phase to select only regular coffee drinkers.

The experiment was administered as two unrelated studies. In the first study the participants completed the same priming task used in Experiment 1. In the second study participants were each given a cup containing 6 oz of coffee.

Before participants tasted the coffee, we measured their consumption expectations using three nine-point items anchored by “Bad” and “Excellent” (α = .96) (Spreng & O’Mahony, 1993). The items were (1) “What do you expect the quality of the coffee to be?” (2) “What would you expect the taste of the coffee to be?” and (3) “Overall, I expect this coffee to be good?”

In the positive experience condition, they were served a hot cup of a premium coffee blend. The coffee ranged from 130 to 145 °F in temperature (on average, the preferred temperature for coffee is 140 °F (60 °C); Lee & O’Mahony, 2002). In the negative experience condition, participants were served a very weak, lukewarm cup of coffee to which baking soda had been added—i.e., a non-premium coffee blend was brewed using only 50% of the recommended grounds, a teaspoon of baking soda was added to each 6 ounce cup, and the coffee that was served ranged from 70 to 83 °F in temperature. A pretest confirmed that in the positive experience condition, the coffee tasted better (M = 6.27 on a nine point scale) than in the negative experience condition (M = 3.93, F(1, 28) = 22.93, p < .001). Additionally, in this pretest, the positive experience coffee was also perceived to be of a higher quality (M = 6.33) than the negative experience coffee (M = 3.87, F(1, 28) = 26.04, p < .001). A three-item measure of satisfaction with the coffee revealed higher levels of satisfaction in the positive experience condition (M = 6.17) than in the negative experience condition (M = 4.02, F(1, 28) = 22.97, p < .001).

4.1.2. Measures

Satisfaction was measured using three nine-point items anchored by “satisfied/unsatisfied” and “strongly agree/strongly disagree” (α = .94). The items were (1) “How satisfied are you with the quality of the coffee?” (2) “How satisfied are you with the taste of the coffee?” and (3) “I enjoyed the coffee very much.” We additionally measured involvement to rule out any effects of the regulatory focus prime on involvement in the study. Involvement was measured using three nine point items anchored by “strongly agree/strongly disagree” (α = .94). The items were (1) “I took the task of evaluating the coffee seriously.” (2) “I was motivated to make an accurate evaluation.” and (3) “I took my responsibility of participating in this study seriously.”

4.2. Results

4.2.1. Manipulation checks

As expected, coffee drinkers in the positive consumption experience condition were significantly more satisfied (M = 5.93) than coffee drinkers in the negative experience condition (M = 4.02; F(1, 118) = 42.83, p < .001). There were no differences in involvement between promotion-focused participants (M = 7.32) and prevention-focused participants (M = 7.45; F(1, 118) = .40, p = .53), ruling out involvement as an alternative explanation.

4.2.2. Expectations

Means, standard deviations and correlations are presented in Table 1. A two-way ANOVA revealed a significant main effect of regulatory focus on expectations: promotion-focused individuals had higher expectations of the coffee (M = 6.78) than prevention-focused individuals (M = 6.14, F(1, 116) = 5.65, p = .02).

4.2.3. Satisfaction

The effect of the regulatory focus by consumption experience interaction on satisfaction was significant (F(1, 116) = 10.02, p = .002; Fig. 2). In the positive consumption experience condition, satisfaction with the high-quality coffee was lower for participants in the prevention-focused condition (M = 5.46) than it was for participants in the promotion-focused condition (M = 6.39, F(1, 116) = 5.15, p = .03). In the negative-consumption experience condition, satisfaction with the low-quality (lukewarm with baking soda added) coffee was significantly greater for participants with a prevention focus (M = 4.48) than for participants with a promotion focus (M = 3.57, F(1, 116) = 4.87, p = .03). As in Experiment 1, expectations were not correlated with satisfaction (Table 1). These findings replicate the results of Experiment 1 and, in a different context, demonstrate that regulatory focus affects satisfaction in a manner that is consistent with prevention-focused consumers’ conservative bias.

5. General discussion

The objective of this research was to better understand how regulatory focus influences consumer satisfaction. In Experiment 1, promotion- and prevention-primed participants evaluated photos taken from a camera that they had (hypothetically) purchased. In Experiment 2, promotion- and prevention-primed participants evaluated coffee they actually tasted. In both experiments, we find that satisfaction reported after a positive product experience was lower under promotion than under prevention and that satisfaction reported after a negative product experience was higher under prevention than under promotion. We predicted this pattern of results based on previous studies, which indicated that people with a prevention focus exhibit a conservative bias in judgment and decision making (Crowe & Higgins, 1997; Higgins, 2002). In addition, we argued that this conservative bias should directly influence satisfaction, independent of consumers’ expectations. Experiments 1 and 2 provided strong support for these predictions as the results indicate that the impact of regulatory focus on satisfaction is not related to consumers’ expectations. In demonstrating this direct effect, we contribute to regulatory focus theory and extend our understanding of the drivers of consumer satisfaction.

Interestingly, these results also indicate that regulatory focus can affect consumers’ expectations. It may be that because promotion-oriented consumers pursue ideals and have higher aspirations, they...
also have higher expectations for consumption experiences than prevention-focused consumers. Yet, given the strong support in the literature for the disconfirmation of expectations model of satisfaction (e.g., Bolton & Drew, 1991; Oliver, 1980, 1997; Parasuraman et al., 1994), it is likely to surprise some readers that while regulatory focus affects both satisfaction and expectations, those two constructs are not correlated in these data. However, despite its general acceptance, alternatives to the disconfirmation of expectations model have been proposed. For example, Locke (1967, 1969) posited a model of satisfaction that depends on a comparison between what people receive and what they want (versus what they expect). Building on this idea, Westbrook and Reilly (1983) argue that expectations refer to beliefs of what the consumption outcome will be, which may or may not correspond with what is desired or valued in the product. Consequently, expectations and evaluations of a consumption experience will not always correlate. This perspective considers the effect of consumers’ motivations on satisfaction and may be more appropriate when differing goals and value standards are held by consumers—as is the case between those with a prevention versus promotion focus.

The current research has examined the impact that regulatory focus has on satisfaction. A fruitful avenue for future research may be to better understand the interrelationships (or lack thereof) between consumers’ regulatory focus, expectations, and satisfaction.

Similarly, this article has focused on consumers’ cognitive responses to the consumption experience; however, previous research has indicated that consumers’ decision successes and failures lead to different emotional responses under promotion than under prevention (Higgins, 2002; Higgins, Shah, & Friedman, 1997; Idson, Liberman, & Higgins, 2000). It may be worthwhile for future research to explore the intersection between research on the effects of regulatory focus on emotion and the role of affect in consumer satisfaction (Dubé & Morgan, 1998; Fournier & Mick, 1999; Oliver, 1980, 1997; Westbrook & Oliver, 1991).

From an applied perspective, although consumer satisfaction continues to be an important topic for both academics and practitioners, this research represents a first step towards understanding how consumers’ regulatory focus impacts satisfaction. Failing to recognize the effect of regulatory focus may be a critical oversight, especially for firms operating globally, given that research in cross-cultural consumer psychology has highlighted the importance of interdependent and independent self-views (e.g., Markus & Kitayama, 2003). We know that consumers with a more interdependent self-view (e.g., those from collectivist cultures such as China) tend to be chronically prevention-focused, whereas consumers with a more independent self-view (e.g., those from individualist cultures such as the USA) tend to be chronically promotion-focused (Aaker & Lee, 2001). This research suggests that the principles of regulatory focus theory are especially important in understanding satisfaction for firms engaged in international marketing.

References


