For Better or For Worse? Valenced Comparative Frames and Regulatory Focus

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Three experiments examine how prevention-focused and promotion-focused consumers evaluate the comparison brand and what information they anchor on in direct comparative ads framed positively or negatively. Negative (vs. positive) frames lead prevention-focused respondents to exhibit higher evaluations for the advertised brand and lower evaluations for the comparison brand. Under promotion focus, positive (vs. negative) frames lead to more favorable attitudes toward the advertised brand with no difference in attitudes for the comparison brand. Preference for consistency is posited as a possible process explanation. We also find an evaluation order effect: prevention-focused (promotion-focused) individuals evaluate the comparison (advertised) brand first.

Comparative advertising has been extensively investigated (Grewal et al. 1997; Jain and Posavac 2004; Pechmann and Ratneshwar 1991; Zhang, Cronley, and Kardes 2000), yet the issue of comparative message framing and the effect of different types of motivational orientation on the effectiveness of comparative advertising have received little attention. In addition, the implications for the comparison brand are not well understood. Past research has assessed the effectiveness of a direct comparative ad through advertised brand evaluations. However, for a better understanding of direct comparative ads, it is critical to examine (*a*) comparison brand evaluations and (*b*) the difference in attitudes toward the advertised and comparison brands.

While message framing has received wide attention (Meyers-Levy and Maheswaran 2004), framing research in comparative advertising is limited (Jain, Agrawal, and Maheswaran 2006; Shiv, Edell, and Payne 2004). In a recent examination of valenced comparative ads, Jain and Posavac (2004) suggest that examining only advertised brand attitudes limits the scope of comparative advertising research. They state that "negative comparisons lower consumers' brand attitudes of advertised brands. If they simultaneously lower attitudes toward comparison brands more than they do for advertised brands, consumers' brand choice of the advertised brand may increase" (57). In other words, comparative ad effectiveness should be a function of both advertised and comparison brand evaluations. Therefore, while advertised brand attitudes are a useful proxy for ad effectiveness, in the case of comparative advertising in particular, the difference between advertised and comparison brand attitudes also needs to be considered.

Recent research has highlighted the importance of studying the influence of different types of motivations on information processing (Agrawal and Maheswaran 2005b; Jain 2003; Jain and Maheswaran 2000). Our research examines type of motivation (regulatory focus) as a moderator of attitudes toward both the advertised and comparison brands across different comparison frames. We integrate regulatory focus theory with message framing research and identify regulatory focus as the moderator and preference for consistency as the process variable associated with the effects of comparative frames on both advertised and comparison brand evaluations.

REGULATORY FOCUS THEORY

Regulatory focus theory (Higgins 1997) posits two motivational orientations: a promotion focus and a prevention

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focus. Promotion-focused individuals emphasize aspirations and achievements and focus on the presence and absence of positive outcomes. Prevention-focused individuals are concerned with responsibilities and safety and focus on the presence and absence of negative outcomes (Shah, Higgins, and Friedman 1998). In accord, Idson, Liberman, and Higgins (2000) found that promotion-focused individuals exhibited greater "eagerness" in working toward a gain than guarding against a nongain, while prevention-focused individuals displayed greater "vigilance" in preventing a loss than working toward a nonloss.

A direct comparative ad frames the advertised brand as better than the comparison brand (positive frame; e.g., "Airline A is better than Airline B in on-time performance") or the comparison brand as worse than the advertised brand (negative frame; "Airline B is worse than Airline A in on-time performance" [Shiv et al. 2004]). Since promotion-oriented individuals are more persuaded by gains (represented by the advertised brand), a positively framed comparative ad should lead to higher evaluations of the advertised brand. In contrast, because prevention-oriented individuals are more persuaded by benefits to be lost, a negatively framed comparison emphasizing the avoidance of a negative outcome (the comparison brand) should induce more favorable evaluations of the advertised brand. This prediction should also extend to the general persuasiveness of the comparative message measured by the difference between both brands. While the above reasoning predicts advertised brand attitudes, it is unclear how frame and focus will affect comparison brand attitudes. Next, we propose hypotheses related to the comparison brand attitudes and suggest a process explanation for these regulatory focus effects.

Hypotheses

Attitudes toward the Comparison Brand. Promotion-focused people display greater eagerness in striving toward a positive outcome (advertised brand) than away from its absence (comparison brand). Further, consistent with these individuals' desire to secure hits and avoid misses, a positively framed comparison allows for an inclusion of the advertised brand while not necessarily excluding the comparison brand. Hence, the advertised brand being more effective should not have implications for the evaluations of the comparison brand. In addition, since the comparison brand does not speak to the promotion focus concern for positive outcomes, their comparison brand evaluations should be equivalent across both positive and negative frames.

Prevention-focused individuals are concerned about the presence of a negative outcome more intensely than they are concerned with its absence (Idson et al. 2000). They focus on identifying correct rejections and on avoiding incorrect "hits." The comparison brand in the negative frame represents the presence of a negative outcome. A negative frame indicates that, while the comparison brand should be rejected, the advertised brand may be a safe hit. In the positive frame, the comparison brand is merely the absence of a positive, a situation that prevention-oriented people are less motivated toward. Therefore, eschewing the comparison brand in the negative (vs. positive) frame should lead to less favorable attitudes toward the comparison brand. This prediction is supported by the premise that prevention-focused individuals prefer fewer and convergent hypotheses (Liberman et al. 2001) and status quo options (Chernev 2004), goals that are better achieved if they express lower evaluations of the comparison brand in the negative frame while evaluating the advertised brand higher.

H1: Promotion-focused participants will evaluate the comparison brand equally across both frames, while prevention-focused participants will have lower comparison brand evaluations when exposed to negative (vs. positive) comparison frames.

Process: Preference for Consistency. As evidenced by their endorsement of multiple alternatives and placing lower weight on prior choices in making future decisions, promotion-focused individuals should display a lower tendency to allow their evaluation of one brand to bias the other brand's evaluation. In contrast, based on their tendency to entertain fewer hypotheses and to place greater weight on prior choices when making future decisions, prevention-focused individuals should allow their evaluation of one brand to influence their evaluation of the other. Thus, we expect that the tendency of prevention-focused individuals to allow their rating of one brand to affect the other brand's rating is due to the possibility that they have a greater preference for consistency than do promotion-focused individuals.

Preference for consistency (PFC), the "desire to be and to be seen as consistent" (Guadagno et al. 2001, 859), leads individuals with a higher PFC to weigh previous expectations or choices more when engaged in subsequent decisions (Cialdini, Trost, and Newsom 1995). Further, low-PFC individuals "seem open and oriented to the new, in ways that are relatively unconstrained by the established" (Cialdini et al. 1995, 325). Related to regulatory focus, Higgins (1996) suggests that prevention-focused individuals' tendency to narrow alternatives "raises the intriguing possibility that self-consistency motivation is linked to the prevention focus of self-regulation" (1076).

We expect differences in PFC associated with different foci to manifest in two ways. First, we should observe promotion-focused people to exhibit lower PFC as compared to prevention-focused people. Second, promotion-focused participants' interbrand ratings should be uncorrelated whereas prevention-focused participants' interbrand ratings should be significantly correlated in a negative direction. The reason for these expectations is that a high (low) initial brand's evaluation should lead to a low (high) subsequent brand's evaluation for prevention-focused participants whereas the initial evaluation should not systematically affect the subsequent evaluation for promotion-focused participants. Thus, we should observe both a significant (negative) correlation and greater distance in interbrand evaluations for prevention-focused participants

but not for promotion-focused respondents. Stated formally:

H2: Preference for consistency (PFC) will be higher for prevention-focused individuals as compared to promotion-focused individuals.

H3: Prevention-focused participants' interbrand ratings will be negatively correlated whereas promotion-focused participants' interbrand ratings will be uncorrelated.

EXPERIMENT 1

Method

A 2 (focus: promotion/prevention) × 2 (comparative frame: positive/negative) between-subjects factorial design featured a "test ad" comparing two fictitious brands of toothpaste (Crown and Gloss, counterbalanced). The ad's headline either declared the advertised brand as better than the comparison brand or the comparison as worse than the advertised brand. A picture of the advertised brand below the headline was followed by copy comparing the brands on two attributes in a tone consonant with the headline framing.

Ninety-eight undergraduates at Indiana University participated for partial course credit. Regulatory focus was manipulated first by requiring participants to unscramble six jumbled words that were actually names of commonly used brands (Shah et al. 1998). Prevention (promotion) condition participants were informed: "Each incorrectly (correctly) unscrambled name loses (gains) you 2 points. . . . If you don't get a name wrong (correct), you won't lose (will not gain) 2 points. . . . Your goal is to lose (gain) as few (many) points as possible by minimizing the number of names you get wrong (right). For every brand name that you get wrong (right), you will lose (win) 2 points. For every brand name that you don't get wrong (right), you won't lose (win) 2 points." Participants then viewed one of two comparative ads, completed the dependent measures, manipulation checks, and a set of questions "unrelated" to the main study. These consisted of the nine-item, long-version of the PFC scale (Cialdini et al. 1995) designed to identify individuals exhibiting significant differences in their PFC. Finally, participants were debriefed, thanked, and dismissed.

Dependent Measures. Respondents indicated on seven-point scales their evaluations of the advertised ($\alpha = .94$) and comparison brands ($\alpha = .92$) on the following five items: bad-good, low quality–high quality, unpleasant-pleasant, unappealing-appealing, and not likeable–likeable (higher numbers indicate more favorable evaluations). The evaluations were counterbalanced and order had no effect on attitudes toward either the advertised ($F(1, 90) = 1.73$, $p > .1$) or comparison brand ($F(1, 90) = 1.10$, $p > .1$).

Manipulation Checks. The efficacy of the regulatory focus manipulation was assessed by asking subjects to indicate the "extent to which you focused on scoring more points when playing the brand name quiz" and "the extent to which you focused on not losing any points when playing the brand name quiz." The manipulation check for frame valence consisted of two items asking participants to indicate the extent to which the ad stressed (*a*) positive (negative) implications of brushing (not brushing) with the advertised toothpaste and (*b*) positive (negative) implications of not brushing (brushing) with the comparison toothpaste.

Results and Discussion

We first report separate ANOVAs for advertised brand and comparison brand attitudes to capture the asymmetric effects of regulatory focus on comparison brand attitudes. The results for advertised brand attitudes parallel findings for overall persuasiveness. We conduct both within- and between-subjects analyses of differences between sponsor and comparison brand evaluations.

Manipulation Checks. Paired-sample *t*-tests confirmed that promotion-focused (prevention-focused) participants concentrated more on winning (not losing) points ($M_{\text{prom}|\text{score more}} = 4.1$, $M_{\text{prom}|\text{not lose}} = 3.0$, $t(1, 48) = 2.28$, $p < .001$; $M_{\text{prev}|\text{score more}} = 2.98$, $M_{\text{prev}|\text{not lose}} = 3.78$, $t(1, 48) = 1.73$, $p = .01$). Independent *t*-tests relating to the framing question with respect to the advertised brand ($M_{\text{pos}} = 5.02$, $M_{\text{neg}} = 3.29$; $t(1, 96) = 6.71$, $p < .001$) and the comparison brand ($M_{\text{pos}} = 4.00$, $M_{\text{neg}} = 2.70$; $t(1, 96) = 4.80$, $p < .001$) also confirmed that positive frame condition respondents focused on the positive implications of brushing (not brushing) with the advertised (comparison) toothpaste. Thus, the manipulations were successful.

Advertised Brand Evaluation. An ANOVA on evaluations of the advertised brand revealed only a significant interaction ($F(1, 94) = 14.47$, $p < .001$). Specifically, promotion-focused participants expressed higher advertised brand evaluations under positive frames ($M_{\text{pos}} = 5.00$, $M_{\text{neg}} = 4.23$; $t(1, 94) = 2.25$, $p < .05$) while prevention-focused participants did so under negative frames ($M_{\text{neg}} = 5.21$, $M_{\text{pos}} = 4.12$; $t(1, 94) = 3.13$, $p < .01$).

Comparison Brand Evaluation. An ANOVA on the comparison brand evaluations revealed a main effect of frame valence ($M_{\text{pos}} = 4.13$, $M_{\text{neg}} = 3.60$; $F(1, 94) = 6.05$, $p < .05$). Critically, a significant interaction ($F(1, 94) = 6.10$, $p < .05$) revealed support for hypothesis 1: prevention focus led to lower evaluations of the comparison brand under a negative frame ($M_{\text{neg}} = 3.15$, $M_{\text{pos}} = 4.20$; $t(1, 94) = 3.48$, $p = .001$) while promotion focus resulted in equivalent evaluations across frames ($M_{\text{pos}} = 4.10$, $M_{\text{neg}} = 4.10$; $t(1, 94) = .000$, $p > .1$).

Brand Evaluation Differences. A within-subjects analysis of brand evaluation differences revealed a significant brand × frame × focus interaction ($F(1, 94) = 18.78$, $p < .001$). Paired *t*-tests showed significant differences between

the advertised and comparison brand evaluations in the promotion-positive frame condition ($M_{adver} = 5.00$, $M_{comp} = 4.10$; $t(1, 24) = 3.70$, $p = .001$) and prevention-negative condition ($M_{adver} = 5.21$, $M_{comp} = 3.15$; $t(1, 24) = 5.03$, $p < .001$). We also found that this difference was greater in the prevention-negative condition than in the promotion-positive condition ($M_{prev\text{-}neg} = 2.06$ vs. $M_{prom\text{-}pos} = .90$; $t(1, 48) = 2.29$, $p < .001$), substantiating focus × frame effects on overall persuasiveness of comparative ads (see table 1).

Process. To examine the hypothesized link between focus and preference for consistency, the nine-item PFC scale was summed to create a single index score ($\alpha = .90$). An ANOVA on PFC scores revealed only a significant effect of focus ($M_{prev} = 6.10$, $M_{prom} = 4.42$; $F(1, 94) = 42.96$, $p < .001$). In addition, consistent with the expected focus-PFC relationship, the Pearson correlation coefficient confirmed that interbrand attitudes were negatively correlated under prevention focus ($r(49) = -.40$, $p < .05$) and uncorrelated for promotion focus ($r(49) = .16$, $p > .1$). Thus, both hypotheses 2 and 3 were supported.

Experiment 1 revealed systematic differences in comparison brand evaluations under different foci. It also empirically documented differences in PFC associated with promotion focus and prevention focus and implicated these differences as possibly responsible for the pattern of brand evaluation effects for the two groups of participants. In particular, prevention-focused participants' higher PFC appears to result in biased or anchored ratings as judged by differences in interbrand attitudes. Finally, it confirmed that this difference in interbrand attitudes was in the predicted direction (e.g., interbrand attitudes were negatively correlated under prevention focus). Because prevention-focused individuals have greater preference for consistency than promotion-focused individuals, their lower comparison brand rating (when exposed to a negative frame) led to a higher rating of the advertised brand. In contrast, when promotion-focused individuals rated the advertised brand higher (as when exposed to a positive frame), this evaluation did not necessarily lead to a corresponding drop in their comparison brand rating.

Our theorizing suggests that due to their tendency to "ensure hits," promotion-focused respondents focus on the advertised brand. Prevention-focused individuals, because of their desire to "ensure correct rejections," focus on the comparison brand. While the findings related to PFC are useful in establishing the underlying processes, it will be useful to examine which brand is evaluated first and if the order of evaluations depends on regulatory focus. Past anchoring research suggests that information considered first affects subsequent evaluations more (Peake and Cervone 1989). Similarly, direction of comparison might make one brand more influential in the comparisons (Mantel and Kardes 1999). We suggest that people with different regulatory foci might systematically differ in terms of the brand they consider first (the target brand or the comparison brand), and this may contribute to differences in their judgments.

EXPERIMENT 2

The issue of which brand is evaluated first is particularly intriguing with respect to prevention-focused individuals. Are these individuals being consistent with their evaluations of the comparison brand? Or are they being consistent with their evaluations of the advertised brand? In other words, which brand is evaluated first? Prevention-focused individuals are motivated to avoid losses and focus on ensuring "correct rejections." Thus, they are likely to focus on the comparison standard first (since the comparison brand is what is "rejected"). For example, when exposed to a negatively framed message, they should first evaluate the comparison brand low (since it represents a "loss"). Then, driven by their higher PFC, they should form a relatively favorable evaluation of the advertised brand. Promotion-focused individuals are driven by aspirations and hopes and are focused more on what needs to be achieved. Consequently, the advertised brand that is promoted as being better should be their focal object and should be evaluated first. Further, because of lower PFC, their advertised brand judgments should not affect comparison brand evaluations.

H4: Prevention-focused (promotion-focused) participants will evaluate the comparison (advertised) brand first.

It is also likely that because of the different objects prevention and promotion-focused individuals anchor on, they may exhibit differences in information recall (Mantel and

TABLE 1

MEANS FOR BRAND ATTITUDES (EXPERIMENT 1)

	Promotion focus		Prevention focus	
Dependent variable	Positive comparison	Negative comparison	Positive comparison	Negative comparison
Evaluations of advertised brand	5.00^{a1}	4.23^{a2}	4.12^{b1}	5.21^{b2}
Evaluations of comparison brand	4.10^{a2}	4.10^{a2}	4.20^{b1}	3.15^{b3}
Magnitude of differences	$.90^{c1}$	$.17^{c2}$	$-.08^{c2}$	2.06^{c3}
Preference for consistency	4.24^{d1}	4.61^{d1}	6.30^{d2}	5.80^{d2}

NOTE.—Cell sizes ranged from 24 to 25. For each dependent variable, the superscripts above the means indicate significant contrasts. Superscripts with the same alphabets but different numbers are statistically different at the $p < .05$ level of significance.

Kardes 1999). Specifically, prevention-focused people should recall more comparison brand related information while promotion-focused individuals should recall more advertised brand–related information. Such differences in recall will be convergent with the differential anchoring prediction (hypothesis 4) and will provide further evidence of the impact of motivational orientations on the focus of comparison.

H5: Prevention-focused (promotion-focused) participants will recall more information pertaining to the comparison (advertised) brand.

Method

Design, Stimuli, and Procedure. A 2 (regulatory focus: promotion vs. prevention) × 2 (comparative frame: positive vs. negative) between-subjects full factorial design was utilized featuring the stimuli from experiment 1. Eighty-four undergraduates at Indiana University participated in the experiment for partial course credit. Participants first completed the focus manipulation used in experiment 1 and then viewed the advertisement that compared Crown and Gloss. Next, they completed the dependent measures and manipulation checks, were debriefed, and then were dismissed.

Dependent Measures and Manipulation Checks. The order of brand evaluation was examined to allow for a less reactive and more accurate examination of the predictions. The dependent measures consisted of two brand cognition questions and an open-ended recall task. One brand cognition probe asked participants to "evaluate both brands on a scale of 1 to 7, where 1 = extremely bad and 7 = extremely good. You can evaluate either brand first." Two blank lines were provided on the same sheet of paper. This question was designed to assess which brand would be recorded first. The second question, presented on a separate page, asked the participants: "Which brand did you form an opinion of first?" These two questions were counterbalanced, and the order of presentation had no effect on the results ($F < 1$). Next, a distractor task asked respondents to compute products of nine pairs of numbers (e.g., 45 × 3, 62 × 2, etc.), and this was followed by a recall task about each brand separately. Promotion-focused (prevention-focused) respondents were expected to recall more advertised brand–related (comparison brand–related) information.

Results and Discussion

Manipulation Checks. Paired-sample *t*-tests confirmed the success of the manipulation for regulatory focus ($M_{\text{prev}|\text{score more}} = 2.95$, $M_{\text{prev}|\text{not lose}} = 4.11$, $t(1,39) = 2.62$, $p < .001$; $M_{\text{prom}|\text{score more}} = 3.84$, $M_{\text{prom}|\text{not lose}} = 2.72$, $t(1,43) = 3.33$, $p < .001$). Also, independent *t*-tests relating to the framing question with respect to the advertised ($M_{\text{pos}} = 5.51$, $M_{\text{neg}} = 3.45$; $t(1,82) = 5.44$, $p < .001$) as well as the comparison brand ($M_{\text{pos}} = 4.86$, $M_{\text{neg}} = 2.75$; $t(1,82) = 5.27$, $p < .001$) revealed that positive frame respondents focused on the positive implications of brushing (not brushing) with the advertised (comparison) toothpaste.

Brand Evaluation Sequence. Supporting hypothesis 4, a chi-square test of independence ($\chi^2(1) = 12.03$, $p < .01$) for the first question confirmed that prevention-focused participants were more likely to evaluate the comparison brand first (proportion of initial evaluations: advertised brand = .38 vs. comparison brand = .62), while the opposite was true for promotion-focused participants (proportion of first opinions: advertised brand = .75 vs. comparison brand = .25). Similar results were obtained for the more direct probe ($\chi^2(1) = 7.88$, $p < .01$): prevention-focused participants were more likely to form an opinion about the comparison brand first (proportion of first opinions: advertised brand = .43; comparison brand = .57), whereas the opposite held for promotion-focused participants (proportion of first opinions: advertised brand = .73 vs. comparison brand = .27). The brand that was evaluated first and the brand that participants indicated they formed an opinion of first were the same 83% of the time, resulting in a significant phi-square correlation coefficient ($\Phi^2(84) = .634$, $p < .001$; Siegel and Castellan 1988).

Advertised and Comparison Brand Evaluations. As in experiment 1, an ANOVA on advertised brand evaluations revealed only a significant interaction ($F(1,80) = 10.10$, $p = .01$). Follow-up contrasts revealed that promotion-focused participants evaluated the advertised brand more favorably in the positive comparison frame context ($M_{\text{pos}} = 4.90$, $M_{\text{neg}} = 3.76$; $t(1,80) = 1.94$, $p = .05$) while prevention-focused participants did so in the negative comparative frame condition ($M_{\text{neg}} = 5.75$, $M_{\text{pos}} = 4.25$; $t(1,80) = 2.53$, $p < .05$).

An ANOVA on comparison brand evaluations revealed a significant frame valence effect ($M_{\text{pos}} = 4.21$, $M_{\text{neg}} = 3.37$; $F(1,80) = 5.57$, $p < .05$). Also, a significant interaction ($F(1,80) = 4.29$, $p < .05$) indicated that prevention focus led to lower comparison brand evaluations under a negative frame ($M_{\text{neg}} = 3.00$, $M_{\text{pos}} = 4.60$; $t(1,80) = 3.06$, $p < .01$), while promotion focus led to equivalent evaluations across frames ($M_{\text{pos}} = 3.87$, $M_{\text{neg}} = 3.76$; $t(1,80) = .21$, $p > .1$).

Within-Subjects Analyses. Replicating experiment 1, a within-subjects brand evaluations analysis revealed a significant brand × frame × focus interaction ($F(1,80) = 13.16$, $p = .01$). Paired-sample *t*-tests showed significant differences in advertised brand and comparison brand evaluations in the promotion-positive frame condition ($M_{\text{adver}} = 4.90$, $M_{\text{comp}} = 3.87$; $t(22) = 2.05$, $p = .05$) and prevention-negative frame condition ($M_{\text{adver}} = 5.75$, $M_{\text{comp}} = 3.00$; $t(19) = 4.03$, $p = .001$). *T*-tests also revealed that the magnitude of difference was greater in the prevention-negative frame condition than in the promotion-positive condition ($M_{\text{prev-neg}} = 2.75$ vs. $M_{\text{prom-pos}} = 1.03$; $t(41) = 2.05$, $p = .05$; see table 2).

TABLE 2

MEANS FOR BRAND ATTITUDES (EXPERIMENT 2)

	Promotion focus		Prevention focus	
	Positive comparison	Negative comparison	Positive comparison	Negative comparison
Evaluations of advertised brand	4.90^{a1}	3.76^{a3}	4.25^{b1}	5.75^{b2}
Evaluations of comparison brand	3.87^{a2}	3.76^{a2}	4.60^{b1}	3.00^{b3}
Magnitude of difference	1.40^{c1}	$.00^{c2}$	$-.35^{c2}$	2.75^{c3}
Recall: advertised brand	2.90^{d1}	3.30^{d1}	2.00^{d2}	2.30^{d2}
Recall: comparison brand	1.30^{e1}	1.10^{e1}	2.10^{e2}	2.30^{e2}

NOTE.—Cell sizes ranged from 20 to 23. For each dependent variable, the superscripts above the means indicate significant contrasts. Superscripts with the same alphabets but different numbers are statistically different at the $p < .05$ level of significance.

Further, consistent with the expected focus-PFC relationship, the Pearson correlation coefficient confirmed that interbrand attitudes were negatively correlated under prevention focus ($r(40) = -.42$, $p < .01$) and uncorrelated for promotion focus ($r(44) = .10$, $p > .1$).

Recall. The total number of items mentioned for each brand was computed for each participant. Supporting hypothesis 5, a 2 × 2 ANOVA found that promotion-focused individuals recalled significantly more advertised brand information ($M_{prom} = 3.11$, $M_{prev} = 2.20$; $F(1, 80) = 6.31$, $p < .05$), while prevention-focused participants recalled more comparison brand information ($M_{prev} = 2.1$, $M_{prom} = 1.25$; $F(1, 80) = 6.60$, $p < .05$).

EXPERIMENT 3

The results of experiment 2 suggest that because promotion focus encourages participants to focus on the target brand, features of the target brand drive the comparison process. Similarly, prevention focus encourages participants to focus on the comparison brand, and hence features of the comparison brand drive the comparison process. Germane to these findings is the research by Mantel and Kardes (1999), which shows that comparing the target brand to the comparison brand results in more favorable evaluations of the target brand when its unique features are positive (vs. negative). Similarly, comparing the comparison brand to the target brand results in more favorable evaluations of the comparison brand when its unique features are positive (vs. negative). Thus, in experiment 3, we manipulated the valence of shared and unique features of the advertised brand and the comparison brand to perform a stronger test of the direction of comparison effect. Also, we examined the evaluative effects of promotion focus by controlling for prevention focus and vice versa.

Given that promotion focus encourages a target brand focus and prevention focus encourages a comparison brand focus, integrating our findings with those of Mantel and Kardes (1999), we predicted that greater promotion focus will be associated with a higher (lower) evaluation of the advertised brand in the positive (negative) unique attribute condition (with no effect on comparison brand evaluation in either unique attribute condition). At the same time, we expected greater prevention focus to be associated with higher evaluations of the advertised brand and lower evaluations of the comparison brand in the unique negative attribute condition—with no effect on advertised brand attitudes when the unique attributes were positive.

Procedure. A 2 (focus: promotion vs. prevention) × 2 (frame: positive vs. negative) × 2 (valence of unique attributes) × 2 (category: pens or calculators) mixed design was utilized. One hundred and two undergraduates at Indiana University participated in the experiment for partial course credit, with two eliminated because of incomplete responses. Focus was measured by eliciting actual, ideal, and ought self-related qualities that participants associated with themselves (Shah et al. 1998). Specifically, participants were asked to think of up to 10 each of actual, ideal, and ought self-qualities (on separate pages) and to rate these on a scale of 1 (slightly) to 4 (extremely) in terms of how much they applied to them. Using Brockner et al.'s (2002) procedure, the common traits that were listed on all three pages were then used to compute a chronic promotion score (absolute difference of actual and ideal self) and a chronic prevention score (absolute difference of actual and ought self), with a lower score indicating a stronger chronic promotion/prevention focus. This was an unobtrusive attempt to obtain ideal and ought trait congruency information as congruency (vs. discrepancy) scores are believed to be a better indication of focus (Pham and Avnet 2004).

Next, respondents saw one of four ads for either pens or calculators featuring a brand comparison. The stimuli were based on Mantel and Kardes (1999), with one difference. While Mantel and Kardes (1999) presented the information as product descriptions, we presented it as framed comparative ads. For example, the headline for the positively (negatively) framed ad for the pens category stated "It makes more (less) sense to buy Circle (Dot) pens." This was followed by a table that compared the two brands (order of presentation was randomized) on nine attributes, five of which were positive and four of which were negative. The manipulation of valence of unique attributes was done in this table comparing the two brands. Specifically, in the unique negative condition, participants saw the two brands as sharing positive attributes but possessing unique negative

attributes. In the unique positive condition, the two brands were shown as sharing negative attributes and having unique positive attributes (see Mantel and Kardes 1999).

Dependent Measures. Following ad exposure, participants evaluated the two brands and responded to the manipulation check for frame valence that asked respondents the extent to which the ad stressed negative/positive implications of choosing/not choosing the advertised/comparison brand. Finally, respondents were thanked, debriefed, and dismissed.

Results and Discussion

Manipulation Checks. Independent *t*-tests relating to the framing question with respect to the advertised brand ($M_{pos} = 4.35$, $M_{neg} = 3.55$; $t(1, 98) = 2.83$, $p < .01$) as well as the comparison brand ($M_{pos} = 4.25$, $M_{neg} = 3.47$; $t(1, 98) = 2.77$, $p < .01$) confirmed that respondents in the positive frame condition focused on the positive implications of choosing (not choosing) the advertised (comparison) brand for both categories.

Mixed Factor Within-Subjects Analyses. Analyses of brand evaluations revealed no effect of product category when either focus score was included in the mixed factor design (promotion: $F(1, 84) = .081$, $p > .1$; prevention: $F(1, 84) = .269$, $p > .1$), permitting us to aggregate data across the two categories. Within-subjects regression revealed a significant brand × frame × promotion interaction ($F(1, 92) = 4.21$, $p < .05$) as well as a brand × valence of unique attributes × promotion interaction ($F(1, 92) = 8.48$, $p < .01$). Similarly, significant interactions were also found for brand × frame × prevention ($F(1, 92) = 5.58$, $p < .05$) and brand × valence of unique attributes × prevention ($F(1, 92) = 4.08$, $p < .05$). These interactions are examined in detail below (see table 3).

Frame × Focus Regression Analyses. Since promotion and prevention measures were expectedly correlated ($r(100) = -.23$, $p < .05$; see Pham and Avnet 2004), separate regressions modeled the effect of focus on brand evaluations. First, to explore the significant brand × frame × focus interaction, advertised and comparison brand evaluations were regressed on promotion and prevention scores, using a split sample method (Kirk 1982), separately for the negative and the positive frame conditions, producing eight distinct regression equations.

Analysis revealed that, with a greater promotion focus, respondents evaluated the advertised brand higher when exposed to a positive frame ($t(1, 53) = -2.24$, $\beta = -.24$, $p < .05$), with no effect on comparison brand evaluations for either frame (positive: $t(1, 53) = .98$, $\beta = .09$, $p > .1$); negative: $t(1, 43) = -1.62$, $\beta = -.09$, $p > .1$). In contrast, a greater prevention focus led participants to evaluate the advertised brand higher ($t(1, 43) = -2.65$, $\beta = -.41$, $p < .05$) and the comparison brand lower ($t(1, 43) = 8.08$, $\beta = .43$, $p < .01$) under a negative frame.

Next, differences in brand evaluations were regressed on promotion and prevention scores for both the negative and positive frames, producing four regression equations. This analysis revealed that, as individuals exhibited greater promotion tendencies, differences in brand evaluations (advertised brand > comparison brand) increased for the positive frame ($t(1, 53) = -2.24$, $\beta = -.32$, $p < .05$). However, as individuals exhibited greater prevention tendencies, brand evaluation differences increased for the negative frame ($t(1, 43) = -3.64$, $\beta = -.84$, $p = .001$).

Valence of Unique Attributes × Focus Regression Analyses. To examine the brand × valence of unique attributes × focus interaction, advertised and comparison brand evaluations were regressed on promotion and prevention scores, again using a split sample method—first for the negative unique attribute condition and then for the positive unique attribute condition. As predicted, this analysis revealed that greater promotion focus was associated with a greater likelihood that respondents evaluated the advertised brand higher in the positive unique attribute condition ($t(1, 48) = -4.11$, $\beta = -.33$, $p < .001$), with no effect on comparison brand evaluations in either unique attribute condition (positive: $t(1, 48) = .68$, $\beta = .05$, $p > .1$; negative: $t(1,48) = -1.38$, $\beta = -.09$, $p > .1$). In contrast, greater prevention focus had no effect on advertised brand evaluations in the positive unique attribute condition ($t(1, 48) = 1.60$, $\beta = .20$, $p > .1$). In the unique negative attribute condition, however, prevention-focused individuals evaluated the advertised brand higher ($t(1, 48) = -2.32$, $\beta = -.20$, $p < .05$) and the comparison brand lower ($t(1, 48) = 2.22$, $\beta = .18$, $p < .05$).

Experiment 3 offered a stronger test of the focus of com-

TABLE 3

REGRESSION ANALYSIS RESULTS (EXPERIMENT 3)

	Promotion focus		Prevention focus	
	Positive comparison	Negative comparison	Positive comparison	Negative comparison
Evaluations of advertised brand	−.24*	.015	.13	−.41*
Evaluations of comparison brand	.09	−.09	.016	.43*

NOTE.—Cell sizes range from 20 to 28. Lower regulatory focus score indicates greater promotion or prevention orientation. Therefore, a negative β coefficient signifies that when the extent of a particular focus increases, brand evaluation is higher. A positive β coefficient signifies that when focus increases, the brand evaluation is lower.

*Significant at the $p < .05$ level.

parison effect by examining the influence of one type of focus by controlling for the other. Prevention-focused individuals allowed their lower evaluation of the comparison brand to affect their advertised brand evaluations in an upward manner whereas promotion-focused individuals did not permit their higher evaluation of the advertised brand to influence their comparison brand evaluations. Also, focus interacted with unique attribute valence to differentially affect the evaluations of advertised versus comparison brands, which is consistent with the first two experiments.

GENERAL DISCUSSION

In this research, we show that the favorable evaluations of the advertised brand may be attributed to (*a*) the favorable nature of the comparison and (*b*) the lowering of the comparison brand evaluation due to an unfavorable comparison framing. Our data also suggest that, from an overall persuasion perspective (advertised brand evaluation minus comparison brand evaluation), the most effective message is that in the prevention-negative cell followed by promotion-positive cell. The other two cells (prevention-positive and promotion-negative) do not accord superiority to the advertised brand over the comparison brand (as is likely the goal of the advertiser).

We establish a causal asymmetric link between framing and focus relating to evaluations of the advertised and the comparison brands. Besides documenting this interesting asymmetry, we identify the process underlying this pattern of response. The higher PFC associated with prevention induces negative correlations between the evaluations of the two brands. In contrast, the lower PFC associated with promotion allows for independent evaluations of the two brands. PFC may also play a role in previously recorded regulatory effects such as the prevention-focus driven preference for the status quo and the notion that promotion-focused individuals entertain multiple hypotheses but prevention-focused individuals consider a restricted set. Further, existing research has found that people in interdependent (independent) cultures may be more prevention (promotion) focused (Lee and Aaker 2004). An interesting avenue for future research is the role of PFC in the relationship between regulatory focus and culture. In particular, it will be useful to examine whether the relationship between regulatory focus and PFC maps onto a similar culture-PFC relationship (Agrawal and Maheswaran 2005a).

Supportive of the focus-PFC link, we find that focus differentially influences which brand is evaluated first, which comparative frame is effective in driving evaluations, and whether a higher/lower rating of the initially evaluated brand influences the rating of the subsequently evaluated brand. Focus of comparison research (Dhar and Simonson 1992; Sanbonmatsu, Kardes, and Gibson 1991) has shown that the focal object determines how the objects in the set are evaluated. We suggest that the extent of reliance on this object in guiding judgments may be moderated by regulatory focus, with prevention-focused participants possibly exhibiting this effect more.

Finally, it has been argued that the motivational orientation and message format compatibility/fit increases the sense that "it feels right" and that this feeling drives persuasion (Lee and Aaker 2004). While our results for the advertised brand evaluations can be explained by compatibility, the results related to comparative brand attitudes tell another story. These results support the broader notion that people will hold/form attitudes and process information in ways that help them sustain their motivational orientation (Avnet and Higgins 2006). We found that prevention-focused people liked the comparison brand less in a compatible (i.e., negative) frame. Furthermore, in order to sustain their prevention-focused state and satiate their PFC, they formed higher evaluations for the advertised brand. For promotion-focused individuals, while the advertised brand was evaluated higher under a compatible (i.e., positive) frame, the comparison brand attitudes remained unaffected. This could be because sustaining a promotion focus does not require consistency between the attitudes toward the two brands. Our findings present a case for a deeper investigation of the drivers and consequences of compatibility effects. Besides persuasion and the extent or ease of processing, fit may manifest in what attitudes are influenced and in the way information is processed (e.g., order of processing).

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