

# Value from Regulatory Construal Fit: The Persuasive Impact of Fit between Consumer Goals and Message Concreteness

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This research investigates the relationship between regulatory focus and construal level. The findings indicate that promotion-focused individuals are more likely to construe information at abstract, high levels, whereas those with a prevention focus are more likely to construe information at concrete, low levels (experiments 1 and 2). Further, such fit (vs. nonfit) between an individual's regulatory focus and the construal level at which information is represented leads to more favorable attitudes (experiments 3 and 4) and enhances performance on a subsequent task (experiment 3). These outcomes occur because fit enhances engagement that in turn induces processing fluency and intensifies reactions.

A critical issue in developing persuasive messages is the determination of what benefits to communicate to target customers and how to communicate them. For instance, should a TiVo ad highlight the freedom that users enjoy to view what they want, when they want? Or would the message have greater impact if it were to describe how one could replay telecasts of sports events in slow motion? Similarly, should a Budweiser TV spot pay tribute to the brand's heritage of quality by featuring its Clydesdales? Or would it be more persuasive to highlight how Bud's choice hops are hand selected by experts to ensure superior taste? The current research identifies conditions under which each of these message strategies is likely to be effective.

Research pertaining to level of construal offers a starting point for addressing this issue. Construal level refers to the degree of abstraction at which goal-directed actions are represented in the cognitive hierarchy (Liberman and Trope 1998; Vallacher and Wegner 1985, 1987; for a review, see

Trope, Liberman, and Wakslak 2007). High-level construals focus on the desirability of an activity, that is, why certain things are done. Descriptions at this level are abstract, superordinate, and decontextualized. Viewed from this perspective, the personal freedom afforded by TiVo and the assurance of quality provided by Budweiser's brand heritage are high-level construals. In contrast, low-level construals are concerned with the feasibility of an activity and thus pertain to how certain things are done. Descriptions at this level are concrete, subordinate, and contextualized. TiVo's slow-motion viewing capability and Budweiser's hand-selected choice hops represent low-level construals.

The premise on which the present research proceeds is that the persuasive impact of a message featuring a high- or low-level construal depends on the recipients' self-regulatory goal orientation. According to regulatory focus theory (Higgins 1997, 2000), individuals with a prevention focus regulate their attitudes and behaviors to attain safety and security, whereas those with a promotion focus regulate their attitudes and behaviors to attain growth and achievement. Our view is that individuals with a prevention focus are likely to construe information at a low level, whereas those with a promotion focus are inclined to construe information at a high level. Further, we hypothesize that when there is a correspondence between the individual's regulatory orientation and the level at which the message is construed, the evaluation of the message advocacy is more favorable than when such correspondence is absent. These outcomes are thought to occur because a match between

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one's regulatory orientation and the level at which the means of goal pursuit is construed stimulates a subjective experience of engagement. This experience creates a motivational force that absorbs and engrosses people (Higgins 2006; Lee and Higgins 2009). In the context of a persuasive message, engagement is thought to intensify processing of the advocacy and thus positive reactions to it. We refer to these predictions as the fit from construal hypothesis. We test this hypothesis in the present research.

As a starting point, we review literatures that provide a theoretical or empirical basis for the fit from construal hypothesis. Examined first is research that suggests a correspondence between regulatory focus and the construal level of the means of goal pursuit. This is followed by a review of studies that document how a fit between individuals' regulatory focus and their means of goal pursuit enhances the favorableness of target evaluations. Finally, we assess evidence that individuals' subjective experience of engagement mediates the effect of fit on their evaluation of the object of fit (i.e., an integral fit effect) and affects the performance of subsequent tasks that are unrelated to the source of fit (i.e., an incidental fit effect).

### **FIT BETWEEN REGULATORY FOCUS AND CONSTRUAL LEVEL**

Support for the prediction of a relationship between individuals' regulatory focus and the construal level of the means by which they pursue their goal emerges from how these factors are conceived. According to regulatory focus theory, individuals' self-regulatory orientations influence their tolerance for different types of errors in the course of pursuing their goals (Brendl and Higgins 1996; Crowe and Higgins 1997; Higgins 2000; Levine, Higgins, and Choi 2000). Prevention-focused individuals are oriented toward safety and security and thus tend to adopt a vigilance strategy that is manifested by their inclination to guard against errors of commission: they forgo the pursuit of alternatives so as to limit the chances of making mistakes and incurring losses (Crowe and Higgins 1997; Herzstein, Posavac, and Brakus 2007; Levine et al. 2000; Liberman et al. 1999). By describing the feasibility of an activity and specifying how something is done, low-level construals provide the information specificity needed to limit errors of commission. Thus, we predict that individuals with a prevention focus will experience fit when they are exposed to messages that construe the means of goal pursuit at a low level.

Fit requires a different level of construal for those with a promotion focus. These individuals adopt an eagerness strategy in their pursuit of accomplishment and growth that is manifested by an effort to guard against errors of omission (Crowe and Higgins 1997; Levine et al. 2000). They are willing to entertain alternative possibilities to enhance their chances of achieving gains. Because abstract, high-level construals are informative about the desirability of an activity, and the specification of why something is done pro-

vides the basis for considering multiple ways of achieving the goal, we predict that individuals with a promotion focus will experience fit when they are exposed to messages that construe the means of goal pursuit at a high level.

These predictions are not new. A similar speculation about the relationship between regulatory focus and construal level is offered by Liberman et al. (1999). They suggest that "a prevention focus encourages the representation in a more concrete and detailed form because every component of the task can potentially thwart the goal of safety and security. In contrast, a promotion focus might encourage a more abstract and general representation of a task because the goals of advancement and growth depend on finding multiple means of making progress" (1999, 1143). However, these predictions have yet to be tested directly, and the consequences of the correspondence as well as the mechanism that accounts for these consequences are still to be unveiled.

Evidence congenial with the hypothesized relationship between regulatory focus and the construal level of the means of goal pursuit has been reported in the literature. For example, Freitas, Salovey, and Liberman (2001; study 1) had participants complete the Behavioral Identification Form (BIF; Vallacher and Wegner 1989) as a basis for determining their chronic level of construal. The BIF is a 25-item dichotomous response survey in which respondents are asked to describe an action (e.g., reading) either in terms of a low-level ("following lines of print") or high-level construal ("gaining knowledge"). Participants who were more likely to construe actions at a high rather than a low level expressed less interest in bowling with someone who was described as possessing weaker skills than they had. To the extent that a preference for weaker bowling partners reflects vigilance and the attendant goal of limiting losses and a preference for bowling partners with better skills reflects an eagerness orientation motivated by the goal of achieving gains, these results support the view that low-level construals are associated with a prevention focus and high-level construals are associated with a promotion focus.

Another study reported by the same authors (Freitas et al. 2001, study 2) provides additional support for this interpretation. In particular, participants exhibited more interest in bowling with someone with worse skills when the event was in the near future, but they were more interested in bowling with someone with better skills when the event was in the distant future. In light of evidence indicating that a proximal temporal perspective fosters low-level construals and a distal temporal perspective fosters high-level construals (Trope et al. 2007) and that the finding that a proximal temporal perspective is related to a prevention focus and a distal temporal perspective is related to a promotion focus (Pennington and Roese 2003), these results provide support for the hypothesized relationship between regulatory focus and level of construal. In the present research, we extend this analysis by documenting the effects of fit between regulatory focus and construal level on judgment.

## THE EFFECTS OF FIT FROM CONSTRUAL ON JUDGMENT

Regulatory fit theory posits that people experience regulatory fit when their strategies for goal pursuit match their regulatory orientation (Higgins 2006; Lee and Higgins 2009). More specifically, those with a promotion focus experience fit when they adopt eagerness strategies to pursue their goal, whereas those with a prevention focus experience fit when they adopt vigilance strategies. People become more engaged and feel right about their reactions when they experience regulatory fit. In turn, these subjective experiences influence the judgments they render.

Consistent with this theorizing, recent research offers evidence that the experience of regulatory fit enhances the perceived value of a target (Higgins et al. 2003), attitudes toward a brand (Higgins et al. 2003; Keller 2006; Labroo and Lee 2006; Lee and Aaker 2004; Wan, Hong, and Sternthal 2009; Wang and Lee 2006), and willingness to pay for a chosen object (Avnet and Higgins 2003). These outcomes have been observed across different operationalizations of fit. For example, Keller (2006) found that those primed with a prevention focus are more persuaded when the message for a sunscreen emphasizes its effectiveness (a vigilance means) rather than its ease of use (an eagerness strategy), whereas the reverse occurs for those who are primed with a promotion focus. Lee and Aaker (2004) demonstrated that a prevention appeal is evaluated more favorably in the context of a loss versus a nonloss frame, and a promotion appeal is evaluated more favorably in the context of a gain versus a nongain frame. And Mogilner, Aaker, and Pennington (2008) reported that prevention-framed products are preferred when their purchase is temporally proximal, whereas promotion-framed products are more appealing when their purchase is temporally distant.

These findings suggest that regulatory fit can enhance the value of the product, although evidence that fit can have the opposite effect on judgment has also been observed. Aaker and Lee (2001) found that those who experience fit between their regulatory orientation and means of goal pursuit exhibit more favorable evaluations of a message advocacy than those experiencing nonfit when the message arguments are strong and less favorable evaluations when the message arguments are weak. Similarly, Cesario, Grant, and Higgins (2004) observed that positive thoughts lead to more favorable evaluations, whereas negative thoughts lead to more unfavorable evaluations when participants are presented with a fit (vs. nonfit) message. We interpret these findings as evidence that fit results in an increase in engagement that intensifies reactions such that positive reactions become more positive and negative reactions become more negative. When the message arguments are weak, the intensified negative reaction prompted by fit results in less favorable evaluations than those observed under nonfit. However, when message information presents compelling arguments, as is the case in the present research, fit is likely to stimulate more favorable evaluations of a target object than nonfit.

In this article, we test the hypothesis that fit between regulatory focus and the construal level of a persuasive appeal enhances the evaluation of the advocated brand. Support for the fit from construal hypothesis would be obtained if those with a prevention focus exhibit more favorable brand evaluations when they are exposed to information represented at a low- rather than a high-level of construal, and the opposite outcome occurs for those with a promotion focus. In addition, we examine the role of engagement in mediating the effects of fit on judgments and in enhancing people's performance on a subsequent task.

## THE PROCESS BY WHICH REGULATORY FIT AFFECTS JUDGMENTS

The fit from construal hypothesis suggests that fit between individuals' regulatory orientation and the construal level of the means of goal pursuit creates a subjective experience of engagement that intensifies reactions (Higgins 2006; Lee and Higgins 2009). As we noted earlier, support for this premise is reported in studies investigating judgments integral to the creation of fit; that is, fit between regulatory orientation and the means of goal pursuit represented in a message stimulates more extreme (and favorable) judgments of the message advocacy than occurs in the absence of fit (e.g., Aaker and Lee 2001).

Increased engagement induced by fit not only affects responses to tasks that are integral to the experience of fit but also to tasks that are temporally proximate but incidental to the source of the fit experience. For example, Hong and Lee (2008) induced fit or nonfit by asking research participants to think of a promotion or prevention goal and then list vigilant or eager means by which that goal might be pursued. This was followed by an ostensibly unrelated task that involved squeezing a handgrip. Those who experienced regulatory fit exhibited enhanced persistence in squeezing a handgrip, whereas those who experienced regulatory nonfit exhibited a deterioration in performance. Similar findings have been reported in other studies where individuals who experienced fit solved more anagrams than those who experienced nonfit (Förster, Higgins, and Idson 1998; Shah, Higgins, and Friedman 1998).

Thus, investigations of responses that are both integral and incidental to the experience of fit offer support for the view that fit creates engagement that in turn intensifies reactions. Additional support for this theorizing emerges in studies that examine factors that mediate the effect of fit on judgments. For example, Higgins and his coauthors (Higgins et al. 2003; see also Camacho, Higgins, and Luger 2003) suggest that increased engagement arising from fit is characterized by a sense of feeling right, which has been shown to mediate the effect of fit on product judgments (Malaviya and Sternthal 2009). Further, Idson, Liberman, and Higgins (2004) report evidence that the motivation created by fit mediates the intensity of the responses observed. Apparently, "when people experience strong engagement with

something, they are involved, occupied, interested and attentive to it" (Higgins 2006, 451).

Engagement is not the only factor that has been shown to mediate the effects of fit. There is also evidence that processing fluency serves as a mediator of fit effects (Labroo and Lee 2006; Lee and Aaker 2004). Messages that fit with the recipients' orientation are easier to process, and this experience of fluent processing has been found to induce more extreme outcomes. This finding raises the question of the relationship between processing fluency and engagement. For example, it is possible that fluent processing of a fit message is the result of increased engagement from fit. Or fluent processing of a fit message may offer a "feel right" experience for the message recipient that enhances engagement. To gain a better understanding of the relationship between processing fluency and engagement in mediating the effect of fit, we examine the role each plays in the judgment process.

## OVERVIEW OF THE EXPERIMENTS

Three objectives guided the present research. One was to test the fit from construal hypothesis that those with a prevention focus experience fit when the means of goal pursuit is represented in terms of low-level construals, whereas those with a promotion focus experience fit when the means of goal pursuit are construed at a high level. Using different manipulations of regulatory focus, we tested this prediction in experiments 1 and 2 by assessing the tendency to construe information at a high versus low level among those with a promotion or prevention focus.

Another objective of this research was to test the prediction that people's evaluations of an advertised product would be more favorable when the ad content is construed at a level that fits with their regulatory focus. That is, those with a prevention focus would be more favorable toward the product when the information is represented at a low- rather than high-level construal, whereas those with a promotion focus would have more favorable attitudes when the information is represented at a high- rather than low-level construal. These predictions are tested in experiments 3 and 4 by examining the effects of a construal level fit on brand attitudes.

The third objective was to investigate the process underlying the fit from construal level effects. Two approaches were followed. One was to examine factors that were thought to mediate the effect of fit from construal on evaluations. For this purpose, we assess the mediating effects of engagement and processing fluency on evaluations (experiment 4). The other approach was to examine the consequences of fit on the performance of an incidental task (experiment 3). Our prediction is that because fit creates engagement, greater resources should be allocated to a subsequent incidental task in the presence of fit than in its absence.

From a theoretical perspective, support for the fit from construal hypothesis would make a seminal contribution to our understanding of how fit influences judgments by doc-

umenting the nature and role of engagement in mediating the effects of fit. Support for the fit hypothesis would also imply that fit effects are more pervasive than currently believed. They occur not only when a goal orientation, such as regulatory focus, is matched with a particular means of goal pursuit, such as gains and nonlosses, but also for other means of goal pursuit, such as those related to construal level.

From a practical perspective, evidence for the fit from construal hypothesis would suggest strategies for enhancing consumer engagement with the content of persuasive messages. Engagement would be achieved by representing brand benefits at a low level of construal for those who are sensitive to safety and security concerns, whereas high-level construals would be appropriate for those striving to fulfill their growth and achievement goals. Thus, if a consumer's goal were to limit the chances of choosing the wrong beer for a party, a message describing Budweiser's expertly selected hops would enhance persuasion, whereas if the goal were to enjoy a superior beer, a message featuring the brand's heritage of quality would have greater impact.

## EXPERIMENT 1: REGULATORY FOCUS AND CATEGORY BREADTH

Experiment 1 tests the fit from construal prediction that individuals with a promotion focus are oriented toward conceptualizing information at a higher level of construal than those with a prevention focus. We primed regulatory focus by asking participants to think about their hopes and aspirations (promotion focus) or about their duties and obligations (prevention focus; Freitas and Higgins 2002). We then asked participants to classify objects into categories. The number of categories used to perform the classification task served as the dependent variable (Liberman, Sagristano, and Trope 2002).

The choice of a classification task was based on the premise that abstract categories are more inclusive because relatively few details about the kinds of objects that hold membership are specified. The implication of this premise is that those who construe information at a high level would use fewer categories to classify the objects in relation to those who construe information at a low level. Thus, our prediction is that prevention-focused participants, who have more concrete representations, would use more categories when classifying objects than would those with a promotion focus.

### Method

Thirty-two students and staff members ( $M$  age = 26, 18 women) from Northwestern University participated in the experiment. Participants were randomly assigned to the two regulatory focus conditions. Those in the prevention focus condition were asked to think about and list a few of their duties, obligations, and responsibilities, whereas those in the promotion focus condition were asked to think about their hopes, aspirations, and dreams, and to list a few of them.

Participants then performed the classification task (Liberman et al. 2002). They were asked to classify objects that

they would take with them on a camping trip. For this task, they were given the following instruction: "Imagine that you are going with your family on a camping trip and you're thinking about what to bring. Take a look at the following items and place them into groups by writing down the items that belong together, and then circling the items that belong in the same group. Please make sure to include every item, even if you would not use it in reality. Also, please do not overlap; that is, place each item in only one group." The items were brush, tent, matches, camera, soap, gloves, bathing suit, shovel, fishing pole, hat, snorkel, shirts, sweater, sneakers, coat, raft, dog, boots, marshmallows, socks, blanket, flashlight, pants, sunglasses, rifle, shoes, cigarettes, rope, hot dogs, canteen, toothbrush, underwear, beer, sleeping bag, pillow, insect repellent, potato chips, and axe.

Our staff-member participants also completed a second classification task. They were asked to imagine that they were helping to organize a yard sale and needed to classify the following objects: chairs, roller blades, sweaters, crib, candy dish, fish tank, board games, blender, bikes, coats, dumbbells, infant clothes, books, coffeemaker, puzzles, plates, CDs, toaster, toys, cutlery, shoes, skis, chess set, birdcage, ties, baseball cards, picture frames, juicer, ceramic figurines, glassware, boots, dolls, clock, records, T-shirts, lamps, skateboards, and paint brushes. Upon completing the categorization task(s), participants responded to some additional questions including demographic measures.

## Results and Discussion

The results of an analysis of variance (ANOVA) examining the effect of regulatory focus on the number of categories participants used to classify objects for the camping trip indicated a significant regulatory focus effect ( $F(1, 30) = 8.46, p < .01$ ). As predicted, participants who wrote about their duties and obligations (prevention prime,  $M = 7.38$ ) used more categories than did those who wrote about their hopes and aspirations (promotion prime,  $M = 5.50$ ). A similar analysis was performed on the number of categories used to classify objects for the yard sale. Consistent with our hypothesis, participants primed with a prevention focus ( $M = 8.33$ ) used more categories in performing the classification task than did those who were primed with a promotion focus ( $M = 5.75$ ;  $F(1, 12) = 6.12, p < .05$ ).

These findings provide evidence that a prevention focus prompts a lower and more concrete level of construal than does a promotion focus. Because a low-level construal facilitates the perception of differences among objects, people who are inclined to construe information at a low level perceive more differences among objects. As a result, they need more categories to classify the different objects than those who construe information at a high level. Thus, the finding that prevention-focused participants classified objects into more categories than their promotion-focused counterparts offers evidence that those with a prevention focus are more likely to activate low-level construals than those with a promotion focus.

## EXPERIMENT 2: REGULATORY FOCUS AND ACTION IDENTIFICATION

The objective of experiment 2 was to provide convergent evidence for the fit from construal hypothesis that people with a prevention focus instantiate more concrete, low-level construals, whereas those with a promotion focus activate more abstract, high-level representations in memory. For this purpose, we used a different operationalization of regulatory focus and a different indicator of construal level than those employed in experiment 1. We operationalized regulatory focus by priming participants with information that emphasized losses and nonlosses (prevention focus) or gains and nongains (promotion focus) and assessed their tendency to construe information at a high versus low level using the 25-item BIF (Vallacher and Wegner 1989).

### Method

Thirty-five undergraduate students from Northwestern University ( $M$  age = 20, 19 women) participated in the study for \$5. They were randomly assigned to the two regulatory focus conditions. To prime regulatory focus, participants were presented with the following scenario developed by Lee, Aaker, and Gardner (2000): "Imagine you are playing in a game show and so far you have claimed \$1200 in prizes. You have just played the fourth round and lost. Now the game show host presents you with two options." About half of the participants were exposed to prevention-focused information emphasizing potential losses and nonlosses: "If you pick Alternative A, you will have to give up \$800 worth of prizes. If you pick Alternative B, there is a 2/3 probability that you will lose all \$1200 worth of prizes, and a 1/3 probability that you will not lose any of the \$1200 worth of prizes." The remaining participants were exposed to promotion-focused information emphasizing potential gains and nongains: "If you pick Alternative A, you will keep \$400 worth of the prizes. If you pick Alternative B, there is a 2/3 probability that you will not win any of the \$1200 worth of prizes and a 1/3 probability that you will win all \$1200 worth of prizes."

All participants then rated the situation described in the scenario on two types of measures that have been linked to construal level in prior research: attitude valence and task difficulty (Vallacher and Wegner 1985, 1987). Valence was assessed by asking participants to evaluate the situation using 7-point scales (1 = very bad, unfavorable; 7 = very good, favorable). Task difficulty was measured by having participants indicate their agreement with the statements "I found it easy to decide which option to pick" and "I had no difficulty deciding which option to pick" (1 = strongly disagree; 7 = strongly agree). Finally, participants completed the 25-item BIF questionnaire (Vallacher and Wegner 1989). For this task, they were told that the experimenter was seeking their help in understanding what certain behaviors mean to people so as to improve communication effectiveness. They were asked to select which of the two ways best described how they think about certain actions.

For example, participants could identify the action of making a list either as (a) getting organized or as (b) writing things down. The two alternatives represent high and low levels of construal, respectively.

## Results and Discussion

The effect of the regulatory focus prime on participants' BIF scores was examined first. Participants' responses on the BIF questionnaire were subjected to binary coding (high-level construal = 1; low-level construal = 0), and each participant's responses across the 25 items were summed to provide a BIF score. The results of an ANOVA indicated that the effect of regulatory focus on the BIF score was significant ( $F(1, 34) = 7.49, p < .01$ ). As predicted, participants primed with a prevention focus ( $M = 11.37$ ) were more likely to construe the behaviors at a more concrete, low level than participants who were primed with a promotion focus ( $M = 15.13$ ).

These findings are consistent with the fit from construal hypothesis that predicts a correspondence between regulatory focus and level of construal. However, examination of responses on measures that tapped how difficult participants found it to understand the scenario ( $r = .89$ ) and how favorable they were toward it ( $r = .85$ ) suggests that there may be plausible rival explanations for these outcomes. Those in the prevention focus condition perceived the task to be marginally more difficult ( $M = 3.85$ ) than did those in the promotion focus condition ( $M = 4.84; F(1, 33) = 3.48, p = .07$ ). Thus, in accord with Action Identification Theory, which predicts that more difficult tasks are construed at lower levels than easier ones (Vallacher and Wegner 1985, 1987), it is plausible that the correspondence we report between regulatory focus and construal level is, in actuality, a fit between task difficulty and construal level. Along similar lines, participants were marginally more favorable toward the promotion scenario ( $M = 4.56$ ) than the prevention scenario ( $M = 3.82; F(1, 34) = 3.63, p = .06$ ). Because high-level construals are more likely to be positively valenced than low-level construals (Eyal et al. 2004), it may be the favorableness of the scenario rather than regulatory focus that corresponds to construal level.

To assess the veracity of these rival explanations, we examined the relationship between participants' perception of scenario difficulty, their favorableness toward the scenario, and their level of construal as indicated by their BIF score. This analysis indicated that participants' BIF score was not associated with their perception of task difficulty ( $\beta = .38, t < 1$ ) or by their attitude toward the scenario ( $\beta = -.31, t < 1$ ). Furthermore, the significant effect of regulatory focus on participants' construal level remained virtually unchanged ( $F(1, 31) = 8.44, p < .01$ ) when their perception of task difficulty and their attitude toward the scenario were included in the model as covariates ( $F$ 's  $< 1$ ).

The results of experiments 1 and 2 provide support for the fit from construal hypothesis. Across two different operationalizations of regulatory focus (thoughts about hopes and aspirations vs. duties and obligations in experiment 1

and game show scenario emphasizing gains and nongains vs. losses and nonlosses in experiment 2) and two assessments of construal level inclination (classification task in experiment 1 and BIF in experiment 2), the results indicate that those with a prevention focus are more likely to construe information at a low rather than high level of abstraction, and the reverse is true for those with a promotion focus. These results provide evidence for the relationship between regulatory focus and construal level. In experiment 3, we document that people experience regulatory fit when they process information construed at a level that fits with their regulatory focus and that this fit influences the intensity of the judgments they render.

## EXPERIMENT 3: FIT FROM CONSTRUAL AND ENGAGEMENT

Two objectives guided the design of experiment 3. One was to test the hypothesis that fit from construal would enhance brand attitudes in an advertising context. For this purpose, we varied participants' regulatory focus and presented them with an ad for a fictitious brand of elliptical trainer that they were asked to evaluate. Construal level was manipulated within the ad by describing the product in terms of features that highlight why one should exercise (high-level construal) or how one should exercise (low-level construal). The prediction is that those with a promotion focus would be more favorable toward the elliptical trainer when this product was described in terms of high- rather than low-level construals and that the opposite would be found for those with a promotion focus.

The second objective of this experiment was to examine the nature of the subjective experience induced by fit between regulatory focus and construal level. The fit from construal hypothesis posits that people experiencing fit are more engaged and hence more likely to exert greater effort on a subsequent task than those experiencing nonfit (Higgins 2006; Hong and Lee 2008). To test this prediction, participants were asked to perform a task that was incidental to the one that was used to create fit and nonfit after they had evaluated the product promoted in the message. An anagram task was chosen as the incidental task because it was found to be sensitive to fit effects in prior research (Förster et al. 1998; Shah et al. 1998). The number of anagrams solved served as the measure of resource allocation. The prediction is that participants would solve more anagrams after processing a fit message than a nonfit message.

## Method

One hundred fourteen undergraduate students from Northwestern University ( $M$  age = 19.53; 61 female) who exercised at least occasionally were recruited to participate in the experiment. They were randomly assigned to one of the four experimental conditions.

Participants were first presented with a word completion task to prime a promotion or prevention focus mind-set. This entailed asking them to complete either five prevention

word fragments (e.g., d\_ty [duty], s\_fe [safe]) or five promotion word fragments (e.g., e\_g\_r [eager], h\_pe [hope]). Next, in a seemingly unrelated study, participants were presented with an advertising message for the fictitious Samsa elliptical trainer. Half of the participants were exposed to a high-level construal ad for an elliptical trainer with the headline, “The Ultimate Aerobic Machine for a Great Workout!” followed by a subheadline, “Why Exercise?” The ad featured two benefits that addressed high-level concerns of why one would exercise (“gives your body complete conditioning while you achieve cardiovascular training” and “ensures that you get buff”). The remaining participants were exposed to a low-level construal ad with the headline “The Ultimate Aerobic Machine with the Right Features!” and “How to Exercise?” The ad then listed some features of the elliptical trainer describing how the machine worked (“no-impact stepper designed to cushion each step” and “multiple incline setting complements the precise, patented geometry of the stride”). Both ads showed a picture of the elliptical trainer and closed with “Samsa ~ in a class all its own!”

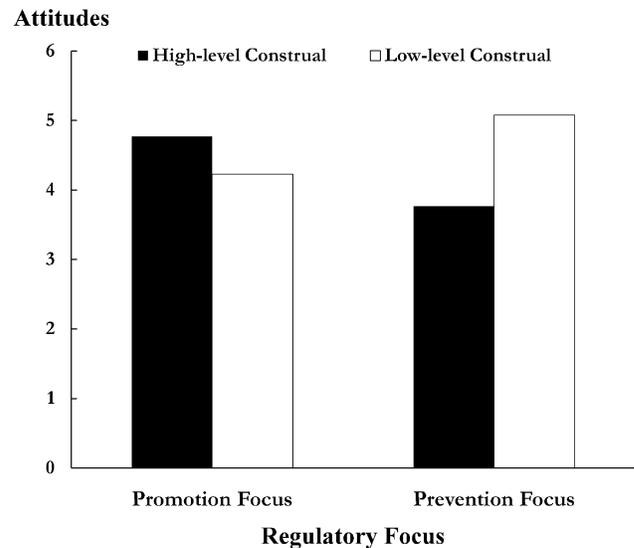
Participants were asked to review the ad and to evaluate the brand by responding to the questions “Do you think the Samsa elliptical trainer will meet your needs?” and “Do you think the Samsa elliptical trainer will provide a good workout?” using 7-point scales (1 = not at all; 7 = definitely). This was followed by an anagram task. Participants were given 3 minutes to solve as many anagrams as they could on a separate sheet of paper. At the end of 3 minutes, they were asked to stop working at the task and to respond to some additional questions that included demographic measures. The number of anagrams solved correctly served as the dependent measure for the incidental task.

## Results and Discussion

**Integral Fit Effect on Brand Attitudes.** To examine how fit between participants’ regulatory focus and the construal level of the appeal affects their evaluations of the advocated brand, we first created a brand attitude index by averaging the two items ( $r = .83$ ). We then conducted a 2 (regulatory focus)  $\times$  2 (level of ad construal) ANOVA to examine the effect of fit on the brand attitude index. The results indicated that neither the main effect of regulatory focus ( $F < 1$ ) nor the main effect of construal level was significant ( $F(1, 110) = 2.66, p > .10$ ). Central to the fit from construal hypothesis, the regulatory focus  $\times$  level of construal interaction was significant ( $F(1, 110) = 15.67, p < .001$ ; see fig. 1). Planned contrasts indicated that prevention-focused participants had more favorable brand attitudes when the product was described at a low construal level ( $M = 5.08$ ) than at a high construal level ( $M = 3.77; t(110) = 3.94, p < .001$ ). In contrast, promotion-focused participants evaluated the brand more favorably when it was described at a high ( $M = 4.77$ ) rather than low construal level ( $M = 4.23; t(110) = 1.66, p < .05$ ). All mean comparisons in the article are based on one-tailed tests.

FIGURE 1

EXPERIMENT 3: BRAND ATTITUDES AS A FUNCTION OF REGULATORY FOCUS AND LEVEL OF CONSTRUAL



**Incidental Fit Effect on Anagram Task.** To assess whether fit from construal enhanced performance on the incidental anagram task, a 2  $\times$  2 ANOVA was conducted on the number of anagrams participants correctly solved. As expected, the results indicated a significant interaction between regulatory focus and construal level ( $F(1, 110) = 7.91, p < .01$ ). Consistent with our predictions, prevention-primed participants solved more anagrams after reviewing a low-level construal message ( $M = 11.67$ ) than a high-level construal message ( $M = 9.17; t(110) = 1.51, p = .06$ ). In contrast, promotion-primed participants who reviewed the high-level construal message ( $M = 12.00$ ) solved more anagrams than those exposed to a low-level construal message ( $M = 7.92; t(109) = 2.48, p < .01$ ). No other effects were significant ( $F$ 's  $< 1$ ).

The results of experiment 3 provide additional evidence in support of the fit from construal hypothesis. Participants who reviewed a message featuring information construed at a level that fits their regulatory focus evaluated the brand more favorably and solved more anagrams in relation to those who reviewed a nonfit message. These results are consistent with the notion that the experience of fit from construal strengthens engagement, as reflected by participants’ enhanced performance on tasks that are integral (evaluating a brand) and incidental (solving anagrams) to the creation of fit. In experiment 4, we sought further evidence for the fit from construal hypothesis by examining the impact of factors thought to mediate the effects of fit on judgments.

## EXPERIMENT 4: ENGAGEMENT AS A MEDIATOR OF THE FIT EFFECT

The objectives of experiment 4 were to replicate the effects of fit from construal on brand attitudes and to enrich

our understanding of the process underlying the fit effect. This entailed examining the role that engagement plays in the effect of integral fit from construal on brand attitudes. We measured participants' experience of feeling right (Carmacho et al. 2003; Malaviya and Sternthal 2009) and motivation (Idson et al. 2004) as indicators of engagement. We also included measures of processing fluency that have been shown to mediate the effects of regulatory fit on evaluation (Lee and Aaker 2004). These measures enabled us to examine the roles of engagement and processing fluency in the process by which fit from construal influences evaluation.

## Method

Ninety-five students from Northwestern University ( $M$  age = 26.91; 41 female) participated in the experiment. Participants were randomly assigned to one of the four experimental conditions. We used the same regulatory focus manipulation as in experiment 3, which involved asking participants to complete five word fragments.

Next, in a seemingly unrelated study, participants were presented with an advertising message for the fictitious Lex-tech 31 flash drive that was represented at either a high or low level of construal (see the appendix, available online). To manipulate construal level of the message, we used multiple operationalizations of the construct that have been successfully used in prior research (Trope et al. 2007). Specifically, we varied construal level by (a) using a headline that focused either on the high-level benefits of owning the flash drive ("having your data in your pocket is music to your ears") or on the low-level features of the flash drive ("2-in-1 feature: a data storage device + an MP3 player"); (b) describing the flash drive at a high level that addressed desirability ("the portable memory that keeps your knowledge base at your fingertips wherever you go" and "an MP3 player that allows you to enjoy your favorite music, while keeping your data safe") versus a low-level description on how the flash drive works ("the connector is retractable within the case so there is no cap to lose" and "an MP3 player with an earjack port that allows you to listen to your favorite songs"); (c) using an abstract linguistic category to convey the product benefits (i.e., nouns, such as "speed, portability, reliability") versus more concrete linguistic categories to convey the same benefits (verbs and adverbs, e.g., "lets you store and retrieve data quickly and reliably wherever you go"; Carnaghi et al. 2008); and (d) varying the shipping location of the product (i.e., more distant vs. local). Both ads showed a picture of the 4-GB flash drive and stated that the price was \$45.

Participants were asked to review the ad and to evaluate the flash drive using a three-item, 7-point scale (1 = dislike, unfavorable, bad; 7 = like, favorable, good). They were also asked to indicate the extent to which they thought the flash drive would meet their needs (1 = not at all; 7 = definitely). Processing fluency was measured by asking participants to indicate their agreement (1 = strongly disagree; 7 = strongly agree) with two statements regarding their perceived ease of processing the information in the message

(easy to process, difficult to understand), and engagement was assessed by asking participants to indicate how they felt (motivated, felt right, felt wrong) while they were reviewing the information using 7-point scales (1 = not at all; 7 = a lot).

## Results and Discussion

**Brand Attitudes.** The fit from construal hypothesis predicts that individuals become more engaged when the level at which information in the message is construed matches their regulatory focus; in turn, this increased engagement prompts the development of more extreme evaluations (more favorable evaluations in the present context) of the advocated object. To test this prediction, we created a brand attitude index by averaging the four items participants used to evaluate the flash drive (like, favorable, good, meets my needs;  $\alpha = .89$ ). These four items loaded onto a single factor that explained 78% of the variance. The results of a 2 (regulatory focus)  $\times$  2 (level of ad construal) ANOVA indicated that the main effect of construal level was not significant ( $F < 1$ ), but the main effect of regulatory focus was significant ( $F(1, 91) = 7.78, p < .01$ ). Prevention-focused participants ( $M = 4.97$ ) had more favorable brand attitudes in relation to their promotion-focused counterparts ( $M = 4.29$ ). Central to the fit from construal hypothesis, this main effect was qualified by the two-way interaction ( $F(1, 91) = 7.52, p < .01$ ; see fig. 2). Planned contrasts indicated that prevention-focused participants had more favorable brand attitudes when they were exposed to the low-level construal message ( $M = 5.31$ ) than to the high-level construal message ( $M = 4.63$ ;  $t(91) = 1.75, p < .01$ ), whereas promotion-focused participants had more favorable

FIGURE 2

EXPERIMENT 4: BRAND ATTITUDE AS A FUNCTION OF REGULATORY FOCUS AND LEVEL OF CONSTRUAL

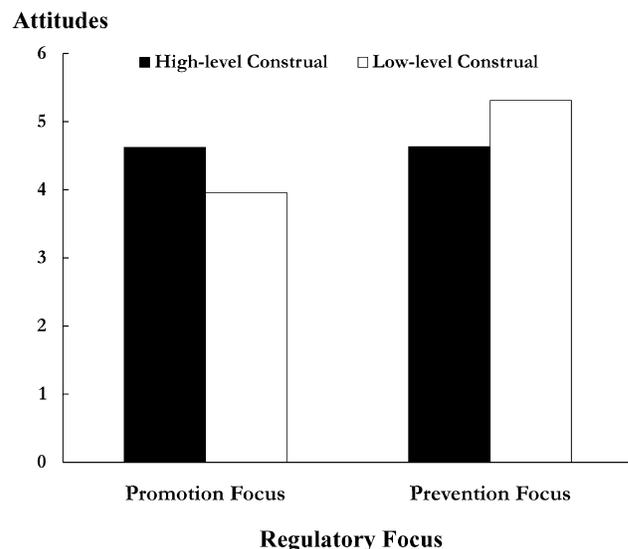
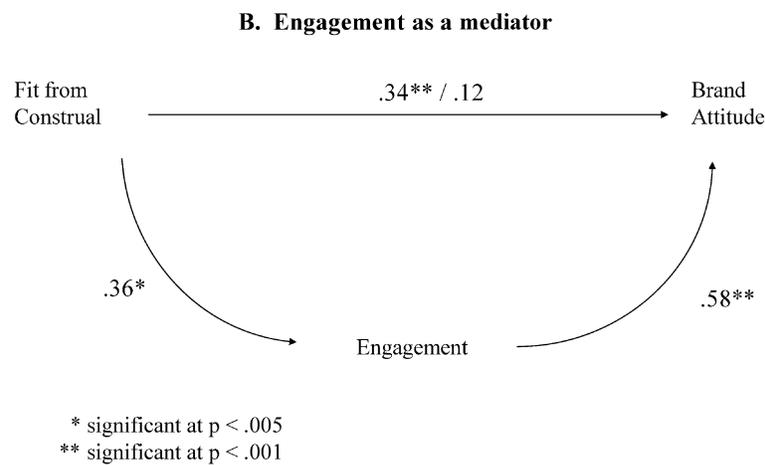
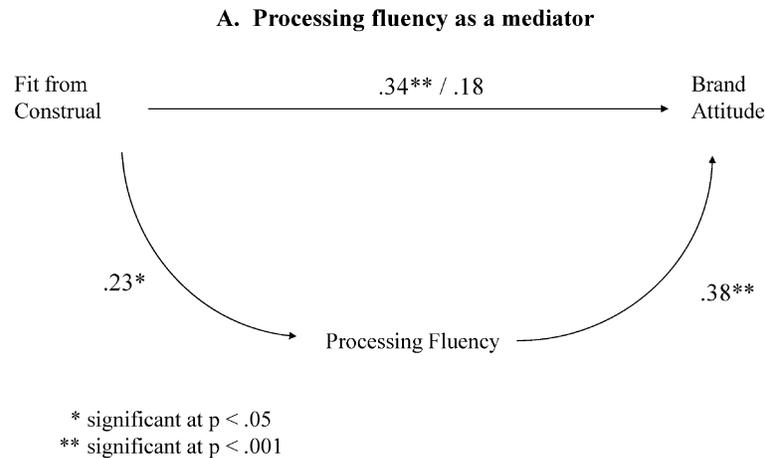


FIGURE 3

EXPERIMENT 4: THE MEDIATING ROLE OF PROCESSING FLUENCY AND ENGAGEMENT ON BRAND ATTITUDE



brand attitudes when they reviewed the high-level construal message ( $M = 4.62$ ) than the low-level construal message ( $M = 3.96$ ;  $t(91) = 2.27$ ,  $p < .05$ ).

**Processing Fluency.** Prior research suggests that the regulatory fit effect on persuasion is mediated by processing fluency (Labroo and Lee 2006; Lee and Aaker 2004). The results of a  $2 \times 2$  ANOVA on the processing fluency index ( $\alpha = .73$ ) indicated that the main effect of regulatory focus was significant ( $F(1, 91) = 25.58$ ,  $p < .001$ ). Those with a prevention focus ( $M = 5.85$ ) perceived the information to be easier to process than did those with a promotion focus ( $M = 4.61$ ). The construal level main effect was not significant ( $F < 1$ ). Consistent with prior findings, the regulatory focus  $\times$  construal level interaction was significant ( $F(1, 91) = 6.91$ ,  $p = .01$ ). Planned contrasts indicated that participants primed with a prevention focus perceived the low-level construal message to be easier to process ( $M = 6.21$ )

than the high-level construal message ( $M = 5.55$ ;  $t(91) = 1.79$ ,  $p < .05$ ), whereas those primed with a promotion focus perceived the high-level construal message to be easier to process ( $M = 4.90$ ) than the low-level construal message ( $M = 4.32$ ;  $t(91) = 2.00$ ,  $p < .05$ ).

A series of regression analyses were conducted to examine the role of processing fluency as a potential mediator of the fit effect (Baron and Kenny 1986; fig. 3). The results indicated that (a) fit from construal led to greater processing fluency ( $\beta = .23$ ,  $t(91) = 2.35$ ,  $p < .05$ ); (b) processing fluency led to more favorable brand attitudes ( $\beta = .42$ ,  $t(91) = 4.50$ ,  $p < .001$ ); (c) fit had a direct effect on brand attitudes ( $\beta = .34$ ,  $t(91) = 2.74$ ,  $p < .001$ ); and (d) the effect of fit on brand attitudes became marginally significant when processing fluency was included in the model as a predictor ( $\beta = .18$ ,  $t(91) = 1.93$ ,  $p = .06$ ), whereas the effect of processing fluency on brand attitudes remained significant

( $\beta = .38$ ,  $t(91) = 3.98$ ,  $p < .001$ ). A Sobel (1982) test confirmed that the reduction of the fit effect was significant ( $z = 1.96$ ,  $p < .05$ ), providing evidence that the effect of fit from construal on brand attitudes was partially mediated by processing fluency.

**Engagement.** Next, we examined how fit from construal affected participants' subjective experience of engagement and its role in mediating the effect of fit on attitude. An engagement index was created by averaging the three items used to measure the construct (motivated, feel right, feel wrong [reverse coded];  $\alpha = .84$ ). A factor analysis showed that the three items loaded onto a single factor that explained 75.8% of the variance. A  $2 \times 2$  ANOVA on the engagement index indicated that the main effect of construal level was not significant ( $F < 1$ ), but the main effect of regulatory focus was significant such that those with a prevention focus felt more engaged ( $M = 4.90$ ) than promotion-focused participants ( $M = 3.96$ ;  $F(1, 91) = 14.82$ ,  $p < .001$ ). More central to this research, the regulatory focus  $\times$  level of construal interaction was significant ( $F(1, 91) = 8.78$ ,  $p < .005$ ). Planned contrasts indicated that prevention-primed participants felt more engaged in response to the low-level construal message ( $M = 5.22$ ) than to the high-level construal message ( $M = 4.59$ ;  $t(91) = 1.60$ ,  $p < .05$ ). The reverse occurred for those primed with a promotion focus in that they felt more engaged when they were presented with the high-level construal message ( $M = 4.37$ ) than the low-level construal message ( $M = 3.54$ ;  $t(91) = 2.11$ ,  $p < .05$ ). These results support the view that people become more engaged when the construal level of the message matches their regulatory focus.

We conducted a series of analyses to examine the role that engagement played in the effect of fit on processing fluency and on brand attitudes. First, we examined how engagement influenced participants' perceived ease of processing by regressing processing fluency on the engagement index. The results indicated that engagement had a significant effect on processing fluency ( $\beta = .54$ ,  $t(93) = 5.89$ ,  $p < .001$ ). When engagement and regulatory fit were both included in the regression model as predictors of processing fluency, the effect of fit from construal that was reported to be significant in our earlier analysis became nonsignificant ( $\beta = .18$ ,  $t(90) = 1.54$ ,  $p > .10$ ), whereas the effect of engagement was significant ( $\beta = .38$ ,  $t(90) = 3.92$ ,  $p < .001$ ). A Sobel (1982) test confirmed that the reduction of the fit effect was significant ( $z = 2.35$ ,  $p < .05$ ), providing evidence that the effect of fit from construal on processing fluency was mediated by engagement. Apparently, participants became more engaged when they were presented with a message construed at a level that fit with their regulatory focus and, as a result, perceived the message to be easier to process.

These findings suggest that engagement may be the true construct underlying the fit effect on attitude. A series of regression analyses provide support for the premise that participants' subjective experience of engagement mediated the relationship between fit from construal and brand attitudes

(Baron and Kenny 1986; see fig. 3): (a) fit from construal led to a feeling of engagement ( $\beta = .36$ ,  $t(91) = 2.96$ ,  $p < .005$ ); (b) greater engagement induced more favorable brand attitudes ( $\beta = .62$ ,  $t(93) = 8.30$ ,  $p < .01$ ); (c) fit had a direct effect on brand attitudes ( $\beta = .34$ ,  $t(91) = 2.74$ ,  $p < .001$ ); (d) the effect of fit became nonsignificant when engagement was included in the model as a predictor ( $\beta = .12$ ,  $t(90) = 1.19$ ,  $p > .20$ ), whereas the effect of engagement on brand attitudes remained significant ( $\beta = .58$ ,  $t(92) = 6.78$ ,  $p < .001$ ). A Sobel (1982) test confirmed that the effect of fit from construal on brand attitudes was mediated by the subjective experience of engagement ( $z = 2.78$ ,  $p = .005$ ). Further, when both engagement and processing fluency were included in the model as predictors of brand attitude, only the effect of engagement was significant ( $\beta = .55$ ,  $t(89) = 5.90$ ,  $p < .001$ ); neither the effect of fit ( $\beta = .11$ ,  $t(89) = 1.02$ ,  $p > .30$ ) nor the effect of processing fluency ( $\beta = .09$ ,  $t < 1$ ) was significant.

These results provide further evidence for the fit from construal hypothesis. We show that fit led to more fluent processing of the message and more favorable brand attitudes, replicating prior findings (Lee and Aaker 2004). More important, we demonstrate that people become more engaged when they process information construed at a level that fits with their regulatory focus and that increased engagement mediates the effects of fit on processing fluency and on brand attitudes.

## GENERAL DISCUSSION

The present research offers support for the fit from construal hypothesis, which predicts a correspondence between regulatory focus and level of construal. Whereas prevention-focused individuals tend to construe information at a low level, those with a promotion focus are more inclined to construe information at a high level. Consistent with these predictions are the findings that participants primed with a prevention focus used more categories to classify objects (experiment 1) and conceptualized action identities at a more concrete level (experiment 2) than did those primed with a promotion focus.

Also consistent with the fit from construal hypothesis is the demonstration that people develop more favorable attitudes toward an advertised product when the information in the advertisement is construed at a level that fits with their regulatory focus. Prevention-focused participants had more positive brand attitudes when the product was described at a low rather than a high level of construal. In contrast, promotion-focused participants had more favorable brand attitudes when the product was described at a high versus low level of construal (experiments 3 and 4).

Finally, by examining mediators and consequences of fit, this research offers insights into the process by which fit between regulatory focus and construal level influences brand attitudes. Specifically, we find support for the view that fit from construal increases engagement, which in turn leads to intensified reactions. Engagement was assessed by using an incidental anagram task (experiment 3) and mea-

asures of motivation and feeling right (experiment 4), and intensified reactions were manifested in participants' more favorable brand attitudes in an integral evaluation task (experiments 3 and 4). We also replicated the prior finding that processing fluency mediated the effect of fit on brand attitudes (Lee and Aaker 2004). More important, we showed that enhanced processing fluency is the result of increased engagement. That is, engagement is the construct that underlies the effect of fit from construal on processing fluency and brand attitude (experiment 4).

Additional support for the fit from construal hypothesis is found in investigations beyond the ones reported here. In cross-cultural research, Morris and Peng (1994) observed that those from a collectivist culture assigned greater weights to low-level contextual factors than did those from an individualist culture. And Trafimow, Triandis, and Goto (1991) found that when participants were asked to describe the self, those from a collectivist culture used more concrete self-descriptions (e.g., brother, student), whereas those from an individualist culture were more likely to provide self-descriptions that were relatively abstract (e.g., kind, honest). To the extent that individuals from a collectivist culture are more prevention-focused and those from an individualistic culture are more promotion-focused (Lee et al. 2000), these findings are congenial with the fit from construal hypothesis.

One additional observation warrants discussion. It is the similarity in the style of information processing associated with promotion focus and positive mood. In relation to a neutral mood state, a positive mood state has been shown to facilitate the association of disparate cues (Kahn and Isen 1993; Lee and Sternthal 1999), foster the processing of abstract information such as metaphors (Roehm and Sternthal 2001), stimulate the generation of alternatives (Murray et al. 1990), and enhance creativity (Isen, Daubman, and Nowicki 1987). One possible explanation for these common findings is that a promotion focus may prompt abstract processing by inducing a positive mood. However, investigations showing that the regulatory fit effect is not mediated by mood fail to support this hypothesis (e.g., Crowe and Higgins 1997; Friedman and Förster 2001; Higgins et al. 2003). Alternatively, it may be that the common effects of positive mood and promotion focus on information processing occur because a positive mood state induces a promotion focus. Finally, it may be that both positive mood and promotion focus operate independently but have similar effects on information processing. A determination of whether and how regulatory focus and mood are related awaits future research.

From a managerial perspective, the evidence we have marshaled in support of the fit from construal hypothesis offers prescriptions for influencing consumers' brand attitudes. It highlights the importance of developing insights about consumers' regulatory goals. Knowledge of these goals provides a guide for the construction of advertising messages that engage consumers at the appropriate level of construal to enhance brand evaluations.

The practical value of the fit from construal hypothesis is illustrated in considering the application of a laddering-

up strategy in advertising. Laddering up involves initially presenting a brand feature (e.g., Pantene has the Pro-V ingredient), then promoting the functional benefits of the feature (e.g., Pro-V makes your hair look and feel healthy), and finally elaborating on the emotional implication of the benefit (e.g., healthy looking hair makes you feel good about yourself). If we view features as low-level construals and emotional benefits as high-level construals, the fit from construal hypothesis offers a prescription about when laddering up is likely to be effective. The insight gained from the present research is that the level on the ladder that produces the greatest persuasive impact is a function of the target consumer's self-regulatory goal. For those consumers whose goal is growth and accomplishment, laddering up by focusing on abstract construals that address the desirability of the product is likely to heighten engagement and enhance brand evaluations, regardless of whether their promotion focus is a dispositional or cultural orientation, or whether it is prompted by the nature of the product category under consideration or some external factors. However, for those consumers whose goal is safety and security, laddering up creates a nonfit experience that may render the message less persuasive. Messages that use a laddering-down strategy and focus on low-level construals related to feasibility are likely to be more persuasive than those that ladder up to emotional benefits.

Implementation of the strategies implied by the fit from construal hypothesis would require identifying the regulatory focus of the target consumer. As we noted earlier, membership in a collectivist or individualistic culture can serve as one indicator of regulatory orientation. But even within the same culture, a promotion or prevention focus can be temporarily induced as a function of the nature of the product and the usage occasion. For example, a consumer may be looking to enhance her appearance by using Pantene shampoo, in which case she is likely to adopt a promotion focus, whereas the consumer looking to get rid of dandruff by using the Head & Shoulders shampoo may be more likely to adopt a prevention focus. Similarly, financial investors in a bear financial market are likely to be prevention focused, whereas those in a bull market are likely to be promotion focused. And in situations where the regulatory orientation of the target consumer is unknown or mixed, it should be possible to create self-contained fit messages by describing promotion benefits using high-level construals and prevention benefits using low-level construals (Lee and Aaker 2004; Wang and Lee 2006).

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