

Regulatory Focus and Alternative Processing Conditions: Attribute Importance Versus Attribute Ease of Imagibility

Abstract

Promotion focused people are more motivated to use imagery heuristics in comparison to prevention focused people. In the context of a product choice, promotion (prevention) focused people had higher evaluation and purchase intention when they used imagery (analytical) processing to base their decision. Further, promotion focused (prevention) focused people exhibited higher attitude towards advertisement, brand and purchase intention when the advertisement for a product used elements to encourage imagery versus analytical processing.

Introduction

Tom was recently looking for a house in a town to which he has moved with a new job. Along with his housing agent Ben, he looked at several houses. He finally settled upon one, which according to him was a place where he could visualize his wife and kids comfortably settling in.

The above example narrates a situation where a consumer probably uses an imagery mode of decision making rather than a cold analytical mode. In their daily lives, consumers often make such decisions. For example, a person may like to visualize in his mind about the car which he or she wants to buy. Marketing literature has long addressed this style of information processing as the “imagery heuristics” (Keller and McGill 1994), who showed that under certain conditions consumers may be more influenced by imaginability of product attributes rather than by their importance. Recent research in imagery processing (Thompson and Hamilton 2006) shows that an advertisement’s effectiveness may be increased by matching comparative (non comparative ad) with

analytical (imagery) style of information processing. To date, most of the research in this area has focused on comparing different information processing styles (imagery versus analytical) and its implication on consumer behavior e.g. attitude, choice etc in the context of products and advertisements (e.g. MacInnis and Price 1987; Keller and McGill 1994; Thompson and Hamilton 2006). There is however a lack of current research in the area which tries to understand the motivational antecedent to imagery and analytical information processing style. In our current work, we have tried to understand what motivates an individual to take up a particular information processing style over another. We argue that regulatory focus can be an important motivational antecedent for preferring a particular type of information processing style over the other. Across two studies we show that matching a certain regulatory concern with a particular style can lead to higher product evaluation and increased advertisement effectiveness (attitude towards the advertisement, brand and purchase intention) both in the context of a product choice and product advertisement. We further show that both verbal and a combination of verbal and imagery information can be used to manipulate imagery and analytical processing conditions in people with different regulatory motivations.

Through our present work we contribute both to the field of regulatory focus theory and imagery heuristics theory. Our research is motivated by strong recommendations from existing scholars to develop more theories in this area. For example, researchers like Avnet and Higgins (2006) have advocated for more research in the area of regulatory fit as it is still in the nascent stage and is in the process of new and exciting discoveries. In the area of imagery heuristics, Keller and McGill (1994) recommended that future research should determine conditions that encourage such

different processing styles. Thompson and Hamilton (2006) in particular recommended that future research should focus on matching ad messages with self regulatory goals in order to improve persuasion. Moreover, in focus with recent renewed interest in the area of verbal and visual information processing (Wyer, Hung and Jiang 2008) our work helps in additional theorization in this area .In the following section, we briefly review theoretical background for our research hypotheses following which we present two studies in support of our main premises. We then conclude with a discussion of our results, their implications and suggestion for future research.

Theoretical considerations

Imagery and Analytical Processing

Imagery processing has been described as a non verbal, sensory representation of perceptual information in memory as opposed to more semantic reason based processing (Childers, Houston and Heckler 1985). An individual using imagery heuristics may use the imagined quality of overall experience to decide an alternative (Keller and MacGill 1994). The example given in the beginning of this article is a typical case whereby a consumer may evaluate a house by “envisioning a romantic evening by the fireplace” and assessing how good the fantasy feels (Keller and MacGill 1994). This approach thus involves simulating the actual experience with an alternative and assessing the desirability of an alternative according to the affective response to the simulated experience (Arieti 1976; Doob 1972). Imagery processing is considered more holistic in nature based on detailed product usage scenario for one alternative (Thompson and Hamilton 2006).

Analytical processing on the other hand is data driven and focuses on verbal retrieving and encoding rather than internal sensory experiences (MacInnis and Price 1987). In this approach an attribute based evaluation of product takes place and a decision maker may combine attribute values to assess overall value of the target product (Sujan 1985). In the same example of the house, a consumer may base his decision of the house by considering important attributes e.g. quality of appliances, security feature etc rather than focusing on internal sensory experiences. In our current work we argue that people with promotion focus will be more motivated to use imagery processing in comparison to prevention focused people who will prefer an analytical style to make their decision. We present current literature on regulatory focus and then discuss how regulatory focus can be an important motivational antecedent to imagery versus analytical processing.

Regulatory Focus

Regulatory focus theory assumes that self-regulation operates differently when serving fundamentally different needs, such as the distinct survival needs of nurturance and security (Higgins 1997). Regulatory focus theory proposes that nurturance related regulation involves a promotion focus – a regulatory state concerned with advancement, accomplishment and aspirations (i.e. a concern with the presence or absence of a positive outcome). In contrast security related regulation involves a prevention focus – a regulatory state concerned with protection, safety and responsibility (i.e. a concern with absence or presence of negative outcome).

Researchers have investigated the effects of regulatory focus on attitudes and behavior of people toward the pursuit of their promotional goal of growth and

advancement or preventional goal of safety and security (Aaker and Lee 2006). These distinct goals prompt people to selectively pay attention to and rely on information that helps them attain their goals. When people with a certain regulatory orientation adopt strategies and engage in activities that are consistent with their regulatory focus they experience heightened motivation and it-just-feels right situation (Aaker and Lee 2006). A review of the regulatory fit literature suggests that when activities or thought processes are undertaken by people that sustain their regulatory orientation, they experience the effect of fit. This value experienced from regulatory fit can transfer to a subsequent evaluation of an object (Higgins et al. 2003). In their study, Higgins and his colleagues (2003) found evidence for the fit effect. Participants gave the same coffee mug a higher price if they had chosen it with a strategy that fit their orientation (eager strategy/promotion; vigilant strategy/prevention) than a strategy that did not fit. The underlying mechanism for the higher evaluation of the mug was transfer of value from fit which was found to be independent of positive mood, perceived effectiveness and perceived efficiency. Thus participants experienced the “feeling right” and in turn misattributed the source of feeling to a subsequent product evaluation. According to Higgins and his colleagues, regulatory fit thus produces a sense of correctness and importance about what one is doing and is more than just a pleasant state (2003).

Further evidences of the fact that people experience the fit effect when they undertake thought process or activities that sustain their regulatory orientation can be found in existing literature. Pennington, Aaker and Mogilner (2005) found that when people with a prevention focus are prompted to take on a temporal versus distal perspective, they evaluate the target product more favourably. Similarly, Keller, Lee and

Sternthal (2004) showed that participants with a promotion (prevention) focus are more positive towards product and product features described at a more abstract (concrete) level. A host of other similar studies show activities that can either sustain or diminish a person's regulatory focus depending on fit or none fit of these activities with the person's focus. Indeed, in this sense, promotion versus prevention focus has been associated with distant versus proximal temporal perspective (Pennington and Roese 2003), additive versus subtractive counterfactuals (Roese et al. 1999), change versus stability (Liberman et al. 1999), creativity versus self-control (Freitas et al. 2002; Friedman and Forster 2001), fun and enjoyment versus safety and security (Lee and Aaker 2001), and dejection versus agitation emotions (Higgins 1997; Lee et al. 2000)

Regulatory Focus and Imagery versus Analytical Processing

In this research we argue that promotion and prevention focused people will use different means to evaluate product alternatives described in terms of imaginable versus important attributes. In line with fit theory, we argue that promotion focus in individuals will encourage the use of imagery in evaluation. Prevention focus on the other hand will encourage an analytical way of evaluation in individuals influenced by attribute importance. We now try to present our argument as to why this is the case. Literature in regulatory focus theory states that promotion focus people are relatively more concerned with gains and are generally sensitive to errors of omission (Higgins 1997). Consequently, this group of people adopts an eager and a risky strategy to maximize gains. Research has shown that eagerness and risky behaviour in individuals promote the usage of heuristics in general (Friedman and Forster 2000). Research by Pham and Avnet (2004) confirms that in the context of an advertisement, promotion focused individuals

were found to rely more on subjective affective responses rather than on the substance of the advertisement to base their decision. It thus seems that to the extent, imagery heuristics suggest the use of emotion as an input to the decision making, promotion focused people will be more motivated to use this particular heuristics to base their evaluation. Prevention focused individuals on the other hand have been found to be relatively more vigilant and risk averse (Pham and Avnet 2004). Prevention focus people are also more concerned with avoidance of losses and are generally sensitive to errors of commission (Higgins 1997). Further, vigilance and risk averse individuals theoretically should rely on information which can be readily justified (Shafir et al. 1993). Extant research further confirms that prevention and risk aversion tends to increase the reliance on analytical processing (Friedman and Forster 2000). In an advertisement context, Pham and Avnet (2004) again found that prevention focused people relied more on substance of the message as compared to the subjective affective responses to the advertisement. Hence, prevention focused people unlike their promotion focused counterparts should be relatively more influenced by the importance of product attributes rather than by the imaginability of product attributes.

Current research in marketing shows that both verbal and visual information can be used to elicit imagery processing in individuals. For example Keller and MacGill (1994) used verbal description of a product to encourage or discourage imagery heuristics. On the other hand, Thompson and Hamilton (2006) used executional cues e.g. both verbal and visual information in their advertisements to manipulate imagery and analytical processing. In our current work we show that based on our above arguments, promotion (prevention) focused people will use imagery (analytical) processing to base

their judgments in both cases i.e. when imagery (analytical) processing is manipulated either through pure verbal or a mixture of verbal and visual information such as in the context of a product description or a product advertisement. We further show that promotion focused people due to their preference for imagery processing will relatively prefer product attributes even though the same attributes may be less important in comparison to other product cues which are relatively more important in terms of their weightage in decision process.

Based on the above line of argument we present the following hypotheses when purely verbal product description is used to manipulate imagery processing:

Hypothesis 1a: Promotion focused people will have a higher evaluation when evaluating a product based on imaginable attributes in comparison to prevention focused people.

Hypothesis 1b: Prevention focused people will have a higher evaluation when evaluating a product based on attribute importance in comparison to promotion focused people.

Hypothesis 2a: Promotion focused people will have a higher purchase intention when evaluating a product based on imaginable attributes in comparison to prevention focused people.

Hypothesis 2b: Prevention focused people will have a higher purchase intention when evaluating a product based on attribute importance in comparison to promotion focused people.

However, when imagery and analytical processing is manipulated through executional cues in the advertisement, the following hypotheses should hold:

Hypothesis 3a: Promotion focused people will have a higher attitude towards the advertisement and the brand when they base their judgment on imagery cues in the advertisement in comparison to the prevention focused people.

Hypothesis 3b: Prevention focused people will have a higher attitude towards the advertisement and the brand when they base their judgment on analytical cues in the advertisement in comparison to the promotion focused people.

Hypothesis 4a: Promotion focused people will have a higher purchase intention for the product when they base their judgments on imagery cues in the advertisement in comparison to the prevention focused people.

Hypothesis 4b: Prevention focused people will have a higher purchase intention for the product when they base their judgments on analytical cues in the advertisement in comparison to the promotion focused people.

Study 1

The objective of study 1 was to examine if promotion (prevention) focused individuals would react more positively towards a product described in terms of more easily imaginable attributes (versus same product described in terms of more important attributes). In other words we would like to seek evidence for our hypotheses 1 and 2 in

the context of a product described in terms of verbal information to manipulate imagery versus analytical processing.

Pretest

The regulatory focus manipulation used for this study has been borrowed from Pham and Avnet (2004) study. In a separate pretest, the researchers had validated the manipulation for regulatory focus before they went ahead and actually used in their research. Taking a cue from the Pham and Avnet (2004) study, we decided to do a small pretest for the manipulation check. A total of 21 undergraduate students took part in a small pretest for the regulatory focus manipulation. Participants in the primed-ideals condition were asked to think about their past hopes, aspirations and dreams and to list two of them. They were then asked to think about their current hopes, aspirations and dreams, and again to list two of them. Similarly, in the primed oughts condition, participants were asked to think about their past duties, obligations and responsibilities and to list two of them. They were then asked to think about their current duties, obligations and responsibilities, and to list two of them. After that they answered some simple DV questions which were related to a different research, and then went ahead to answer the manipulation check items.

For the manipulation check items, participants were presented with three different personal choice questions meant to capture conflict between ideals and oughts. The choices were presented as pairs of statements anchoring opposite ends of seven-point scales. For each pair of sentences, participants were asked to indicate which direction

they would lean toward. Responses were averaged into a single index ranging from 1 (emphasis on ideals) to 7 (emphasis on oughts). As expected, a one way ANOVA showed that participants in the primed- oughts condition put relatively greater emphasis on oughts versus ideals ($M= 5.1$) than did participants in the primed-ideals condition ($M= 2.94$; ($F(1, 19) = 74.16$; $p < 0.001$). The pretest for regulatory focus manipulation check thus appeared to be successful.

Method

We used a 2 (Regulatory Focus: Promotion versus Prevention) x 2 (Apartment Type: Imagery versus Analytical) between subjects design. Sixty nine undergraduate students (41 females) from a large University participated in the experiment in lieu of course credit. All participants were randomly assigned to one of the four conditions. Further in line with recommendations from Pham and Avnet (2004) we used “mood” as a covariate for this study. The usage of mood was further justified as it was felt that different processing conditions (e.g. imagery versus analytical) might affect individual’s mood.

Product Stimulus

The product stimulus that was used for the study was an apartment described in two different ways. The stimulus has been borrowed from Keller & McGill (1994) study. The stimulus combines attributes which are easy (difficult) to imagine along with attributes that are more (less) important e.g. bright and widely lit hallways, shiny hardwood flooring along with security level, age of appliances etc. Keller and McGill (1994) had called one of the versions as the positive-imagery version which combined high values on the easily imaginable attributes (e.g. recently varnished hardwood,

brightly lit hallways) but low values on the difficult to imagine attributes (e.g. below average security, old appliances etc). The opposite trade-off was called the negative-imagery version which had low values on the easily imagined attributes (e.g. dull and worn flooring, narrow and dark hallways) coupled with high values on difficult to imagine attributes (e.g. above average security, new appliances etc). The positive and negative imagery versions were thus designed to manipulate different conditions under which the use of imagery is either encouraged or discouraged while evaluating the focal product. Keller and MacGill (1994) designed this stimulus and further verified in a separate pretest that the mean imaginability ratings were indeed higher for easy to imagine attributes (as compared to difficult to imagine attributes) while mean importance ratings were higher for the difficult to imagine attributes (as compared to easy to imagine attributes). Also, subjects rated the more difficult to imagine attributes as significantly more influential as compared to the easily imagined attributes. In sum this stimulus successfully manipulated two different conditions; one in which usage of imagery processing was encouraged albeit based on less important attributes and in the second case usage of analytical processing was encouraged based on attribute importance. We adapted our product stimulus from the same study with some minor modifications and called them the “imagery” and “analytical” type apartments (Table 1). The expectation was that for promotion focused subjects who were motivated to use imagery, the evaluation would be influenced to a greater extent by the more easily imagined attribute, regardless of the relative importance of these attributes. Prevention focused people who are relatively more motivated to use analytical processing is expected to follow attribute importance to base their judgment.

Manipulation and Measures

The cover story told participants that they were required to participate in two supposedly unrelated studies. In the first part, participants completed the priming task used to manipulate regulatory focus. In line with Pham and Avnet (2004), participants in the promotion- focus condition were asked to write about their hopes and aspirations while those in the prevention-focus condition were asked to write about their duties and responsibilities.

Next, in an ostensibly different task, participants were told that a study was conducted to gain insights into the way consumers make decisions in their daily lives. Two versions of the apartment – an imagery versus analytical type adapted from Keller and McGill (1994) study was used as the product stimulus. After examining the product description, participants completed questions on their evaluation of the product, purchase intention and other demographic questions. Attitude towards the product was measured on a four item seven point scale- the apartment is desirable/ enjoyable /awful/bad value for money ($\alpha = 0.870$). Purchase intention was measured on a single item seven point scale – how likely individuals are to purchase the evaluated apartment anchored at not at all / very likely. Mood which was held as a covariate was measured by 4 item Mood Short Form (MSF) scale anchored at “1= strongly disagree” and “5 = strongly agree”, $\alpha = 0.775$.

Results

Role of Mood

A one way ANOVA was conducted to see whether mood varied significantly across regulatory focus or apartment type conditions. Results showed that mood did not

vary across regulatory focus conditions $F(1, 68) = 3.45, p > 0.05$. Similarly mood did not vary significantly across different apartment types $F(1, 68) = 0.063, p > 0.05$. Since mood didn't vary across the above conditions, it was dropped from further statistical analysis.

Product evaluation

A 2 x 2 ANOVA was conducted to test the main hypothesis. Results showed a significant interaction between regulatory focus and apartment type ($F(1, 65) = 10.151, p = 0.002$). No other main effect was found to be significant. Results of contrast analysis further showed that promotion focused subjects had a higher evaluation of the apartment in comparison to prevention focused people when they used imagery heuristics ($M = 3.75$ versus $3.13, p < 0.05$). Prevention focused subjects on the other hand had higher evaluation of the apartment when they based their evaluation on attribute importance in comparison to the promotion focused people ($M = 4.05$ versus $3.29, p < 0.05$). In addition it was also found that prevention focused people had a higher evaluation when they used the attribute importance as basis for their evaluation in comparison to imagery heuristics ($M = 4.05$ versus $3.13, p < 0.01$). Cell means are shown in Table 2. In sum, we found support for hypotheses 1a and 1b.

<Table 2>

Purchase Intention

A 2X2 ANOVA was conducted to test the hypotheses regarding purchase intention. A significant interaction effect between regulatory focus and apartment type ($F(1, 65) = 5.103, p < 0.05$) was noticed when purchase intention was used as the dependent variable. No other main effect was found to be significant. Results of contrast analysis showed that promotion focused people had higher purchase intention for the apartment

when they evaluated it on basis of imagery heuristics as compared to prevention focused people ($M = 3.56$ versus 2.63 , $p < 0.05$). Prevention focused people on the other hand showed higher purchase intention for the apartment when they based their evaluation on attribute importance in comparison to promotion focused people although the difference was not statistically significant ($M = 3.58$ versus 3.31 , $p > 0.05$). Prevention focused people however showed higher purchase intention for the apartment when they based their evaluation on attribute importance rather than imagery heuristics ($M = 3.58$ versus 2.63 , $p < 0.05$). Cell means are shown in Table 2. Hypothesis 2a was thus only supported.

<Table 3>

Discussion

Results of study 1 provided evidence for our hypotheses that promotion (prevention) focused people indeed preferred imagery (analytical) processing in their decision making. When a product was described in terms of easy to imagine but less important attributes, promotion focused people had higher product evaluation and purchase intention in comparison to prevention focused group. Prevention focused group on the other hand showed a higher product evaluation and purchase intention when they based their decision on important but less imaginable product attributes in comparison to their promotion focused counterpart. The evidence shows that promotion focused people are relatively more inclined to use imagery processing even though in the process they may ignore other important aspects of product description. Our results also show that this kind of preference is in line with the regulatory fit theory (Higgins 2004) wherein people with a particular regulatory focus preferred particular information that helped them to sustain their regulatory orientation. Experiment 1 thus showed that regulatory focus can be an

important motivation behind imagery heuristics. However, although we found evidence for our preliminary hypotheses in our first study, we wanted to delve even deeper into the phenomenon of the actual mechanism that results in the favorable evaluation when promotion (prevention) focused people used imagery (analytical) processing. In view of the above, we designed experiment 2.

Study 2

Study 2 was designed with several objectives. Firstly study 1 used product features which differed in terms of imaginability versus importance. This might have led to some suspicion that the pattern of results might be driven by easy (difficult) attributes. It is possible that promotion focused people may have considered the more easy attributes in comparison to prevention focused people who based their decision on more difficult attributes. In order to rule out this possibility, we decided to use the same features for our focal product. Further unlike study 1, where imagery versus analytical processing was manipulated through product description, our second study manipulated imagery versus analytical processing through executional cues present in the context of an advertisement which contained both visual and verbal information. Thus the primary effort was to replicate the basic findings of study 1 but in a different context. Specifically, we wanted to explore whether promotion (prevention) focused people would retain their preference for imagery (analytical) processing when an actual product advertisement with executional cues to manipulate imagery versus analytical processing was presented to them. In addition, we also wanted to see that whether this matching of regulatory

orientation with the style of processing leads to more favourable ad evaluation, brand evaluation and purchase intention in the context of a product advertisement. In our second study, we also used a different product e.g. a car to further increase the product scope of our theory. Finally, we also tried to use process measures in this study in order to understand the mechanism behind our hypotheses 3 and 4. Further results of our study 1 had shown that mood was not significant across either different regulatory focus or product type conditions. We therefore decided to drop mood from our second study. Pham and Avnet (2004) had similarly confirmed in their findings that they did not find mood to be significantly different across either regulatory focus or advertisement type conditions.

Method

We used a 2 (Regulatory Focus: Promotion versus Prevention) x 2 (Ad Type: Imagery versus Analytical) between subjects design. Ninety one undergraduate students (63 females) participated from a large University participated in the experiment. All participants were randomly assigned to one of the four conditions.

Product Stimulus

The product stimulus used for this study was an advertisement for a fictitious brand of car “Allegrè”. We adapted this stimulus from the Thompson and Hamilton (2004) study where in two different versions of the advertisement type was built around the fictitious brand of car. The advertised brands had superior level of four attributes e.g. sunroof,

sound system, warranty and security system. In the imagery version of the advertisement, imagery cues e.g. short descriptive sentences were used to describe the attributes (You enter the curve, feel the grip of the seat, and enjoy the morning sunrays; Thompson and Hamilton 2004) along with a picture of a Chinese brand of car which students confirmed haven't seen before. Similarly, the analytical version had executional cues (attribute information was displayed using a matrix) to encourage analytical processing along with the same picture of the Chinese car. All graphic elements including the size of the picture were identical across the two conditions. The stimulus is presented in Table 3.

Manipulation and Measures

Similar to our study 1, participants were told that they were taking part in two unrelated studies. Regulatory focus was manipulated in the same way in study 1. In the second part of the study, participants were told that a manufacturer was planning to enter the Australian market with a new brand of car following which they saw either the imagery or the analytical ad of an imaginary brand of car "Allegre". After the subjects have seen the ad, participants answered the dependent variable measures which were attitude towards the ad, attitude towards the brand and purchase intention. Attitude towards the ad and brand was measured with five nine point scale items – to the extent subjects considered the ad and the brand as bad/unpleasant/worthless/unfavourable/not interesting etc. Both the measures showed good reliability (0.945 and 0.968 respectively). Purchase intention was measured with a single nine point scale item – how likely participants were to choose the new Allegre anchored at definitely would not/certainly

would. After answering the dependent measures, participants were asked to rate the ease of evaluating the advertised brand. Following Thompson and Hamilton (2006) subjects in the imagery condition rated how easy it was to create a mental image while participants in the analytical condition rated how easy it was to consider the brand feature by feature. Next participants reported the extent to which they engaged in imagery versus analytical processing by using measures from the same Thompson and Hamilton (2006) study. In addition, single items measures were used to measure involvement and familiarity with the product category.

Results

Attitude towards ad

A 2 x 2 ANOVA was conducted to test the main hypothesis. Results showed a significant interaction between regulatory focus and ad type ($F(1, 87) = 55.39, p < 0.001$). No other main effect was found to be significant. Results of contrast analysis further showed that promotion focused subjects had a higher evaluation of the ad in comparison to prevention focused people when they used imagery cues ($M = 6.73$ versus $4.31, p < 0.001$). Prevention focused subjects on the other hand had higher evaluation of the ad when they based their evaluation on analytical cues in comparison to the promotion focused people ($M = 6.26$ versus $4.19, p < 0.001$). In addition, promotion focused people also preferred the imagery ad over analytical ad ($M = 6.73$ versus $4.19, p < 0.001$) while the reverse was true for the prevention focused group ($M = 6.26$ versus $4.31, p < 0.001$). The above pattern of results were significant even after controlling for both familiarity and involvement as covariates ($F(1, 85) = 45.16, p < 0.001$)

Attitude towards brand

Results of a 2X2 ANOVA showed a significant interaction between regulatory focus and ad type ($F(1, 87) = 34.53, p < 0.001$). No other main effect was found to be significant. Contrast analysis presented strong support for our hypothesis. Promotion focused people had higher brand evaluation when they evaluated the imagery ad in comparison to the prevention focused group ($M = 6.95$ versus $5.25, p < 0.001$). Similarly prevention focused group had higher brand evaluation when they evaluated the analytical ad in comparison to the promotion focused subjects ($M = 7.07$ versus $4.97, p < 0.001$). Further, promotion focused people formed higher brand evaluations when they were exposed to the imagery ad in comparison to the analytical ad ($M = 6.95$ versus $4.97, p < 0.001$). The reverse was true for prevention focused group ($M = 7.07$ versus $5.25, p < 0.001$). The two way interaction between regulatory focus and ad type remained significant even after controlling for both involvement and familiarity ($F(1, 85) = 27.7, p < 0.001$).

In sum, we found strong evidence for our hypotheses 3a and 3b.

Purchase intention

We conducted a 2X2 ANOVA with purchase intention as the dependent variable. Results again showed a significant two way interaction between regulatory focus and ad type ($F(1, 87) = 37.46, p < 0.001$). Contrast analysis supported our hypotheses 4a and 4b.

Promotion focused people had higher purchase intention of the car when they based their evaluation on the imagery ad in comparison to the prevention focused people ($M = 6.04$ versus $3.80, p < 0.001$). Similarly, prevention focused group had higher purchase intention

when they based their evaluation on the analytical ad in comparison to the prevention focused group ($M= 6.14$ versus 3.55 , $p<0.001$). Promotion focused people also expressed higher purchase intention when they based their evaluation on the basis of imagery ad in comparison to the analytical ad ($M= 6.04$ versus 3.55 , $p <0.001$) while the reverse was found true for prevention focused group ($M= 6.14$ versus 3.80 , $p<0.001$). The two way interaction between regulatory focus and ad type was significant even after controlling for both involvement and familiarity ($F (1, 85) = 27.49$, $p <0.001$). All cell means are presented in table 3.

Process measures

A one way ANOVA was conducted with the single item “ease of evaluating” the brand by selecting imagery and analytical ad conditions separately. In the imagery condition, promotion focused people found it easier to evaluate the brand as compared to the prevention focused people ($M = 6.63$ versus 5.00 , $p<0.01$). Similarly, in the analytical condition, prevention focused people found it easier to evaluate the brand as compared to the promotion group ($M= 6.05$ versus 4.73 , $p<0.05$). Interesting pattern of results was obtained once the imagery and analytical processing measures were subjected to similar analysis. Confirming our suspicion that promotion focused people engage in imagery processing, results of one way ANOVA showed that promotion focused people indeed engage in more imagery processing in comparison to the prevention focused people when both are exposed to the imagery ad ($M= 4.72$ versus 2.82 , $p<0.001$). The reverse was true for prevention focused people. Results showed that prevention focused people engaged in more analytical processing in comparison to promotion focused people when

both are exposed to the analytical ad ($M= 4.73$ versus 3.49 , $p<0.05$). The pattern of results present some evidence that promotion (prevention) focused people engage in more imagery (analytical) processing which leads to more ease of evaluation in the fit versus non fit condition.

Discussion

In our second study, we not only replicated promotion (prevention) focused people's preference for imagery (analytical) processing; we did it with much stronger results. Our results showed that this preference is again maintained even in the context of a product advertisement in place of a product description. In other words the preference for imagery and analytical processing remains in both conditions e.g. when imagery (analytical) processing is manipulated through verbal versus a mixture of verbal and visual information. The matching of regulatory focus with information processing style in the context of an advertisement also led to higher attitude towards the ad, brand and resulted in higher purchase intention. Our results also showed that matching of the regulatory orientation with information processing style led to ease of evaluating the brand for both promotion and prevention focused people. Further between, the two groups, our results again showed that promotion (prevention) focused people engage in more imagery (analytical) processing when both the groups are exposed to the same advertisements.

General Discussion

Our work shows that there is a regulatory fit when people with different regulatory concerns undertake different means of evaluation. Promotion (prevention) focused subjects experienced a fit when they evaluated product alternatives or

advertisements of products described in terms of imagery versus analytical cues. This in turn helps us to understand an important motivation behind people's usage of imagery heuristics and furthers knowledge in the field of imagery processing. We also contribute to the concept of the fit theory by presenting evidence that in the process of evaluating different product alternatives and advertisements, promotion and prevention focused people preferred analytical versus imagery processing styles and experienced fit in the process. This is particularly important since current literature in regulatory focus theory generally induces fit by asking subjects to explicitly take up a particular processing style or strategy e.g. eager versus vigilant. This in turn may alter subjects' criteria for evaluation and hence change the relative diagnosticity of different attributes (Keller and Mc Gill 1994). Our work shows that the mere induction of a particular regulatory focus in turn motivates individual to select a particular processing style that helps them to sustain their regulatory orientation. This is more naturalistic in day to day life situation where a change in consumer's regulatory focus may motivate him to choose a particular method of evaluation thereby leading to a particular choice. Our work further shows that the consumer with a particular regulatory focus may even experience fit when browsing an ad laden with imagery or analytical cues. This in turn led to more favourable ad evaluation, brand evaluation and purchase intention for the focal product in the advertisement. In sum, the current work shows that regulatory focus is thus an important motivation behind a particular information processing style when consumers are evaluating a product or an advertisement. Thus while evaluating a product, people can prefer a particular product described in terms of imaginable attribute over one with important attributes given the kind of regulatory concern they have at the moment.

Interestingly, such imagery and analytical processing is also favoured by people with particular regulatory concerns when imagery versus analytical cues is present in an advertisement context. In order to understand the actual mechanism behind the phenomenon, we used process measures in our study 2. Evidence from current research shows that promotion focused people in comparison to prevention focused people engage in more imagery (analytical) processing when both groups are exposed to an imagery (analytical) ad. Further, this matching of regulatory concern with information processing style leads to ease of evaluation of the focal brand in concern. It seems that ease of evaluation in the fit versus non fit condition may be a major driver for the favourable attitude and purchase intention for the focal product.

Our work has important implications for managers too. In terms of product positioning, a product can be positioned on the basis of easy to imagine (important) attributes to people in whom promotion (prevention) focus has been induced in order to drive favourable evaluations. Further, for product categories in which offerings are generally positive e.g. cars, consumers may like to fantasize about alternatives and pick the one that feels the best. Such fantasizing, as our research found can be in turn encouraged by a promotion focus in individuals. Induction of prevention focus on the other hand may cause consumers to be more careful and chose in an analytical fashion. Our work has implications for product advertisements too. For example, advertisements may be designed to encourage imagery versus analytical processing which in turn can be matched with a particular regulatory concern to drive favourable evaluation and purchase intentions in target customers.

Our work is not without its limitations. We have used student sample for our study which might limit the generalizability of the findings. However, the student sample seemed to be quite familiar with our product categories which assuages some of the concern raised in this regard. In terms of future work there are several possibilities. The product categories we used in our study generally have positive evaluations. It would be interesting to test the theory in terms of products which have less favourable evaluations e.g. for newly launched products in the market or for products in which visualization is not favoured e.g. technologically complicated product. Thus for example, it is possible that consumers may use imagery in cities where apartments are generally good but might not do so in cities or in neighborhoods where safety might be a concern. In terms of advertisements, we have used ads in our study which have both visual and verbal elements that complement each other. It would be interesting to see studies where the verbal and visual cues present in the ad are non complementary and especially how promotion and prevention focused people would react to them. Further we have used advertisements for our study which are non comparative in nature. Given that comparative (non comparative) ads are more effective when combined with analytical (imagery) processing styles (Thompson and Hamilton 2006), it would be interesting to see how promotion and prevention focused people would react to them. Following evidence from our current work, it seems that promotion (prevention) focused people would prefer non comparative (comparative) ads given their relative preferences for imagery (analytical) processing. However, future research may look into this which will further contribute to knowledge in this area.

List of Tables

TABLE 1

Study 1: Stimulus used for Imagery versus Analytical Apartment

Imagery Apartment	Analytical Apartment
Hallways: The apartment has hallways that are wide and brightly lit.	Hallways: The apartment has hallways that are narrow and dark.
Flooring: The hardwood flooring has been recently sanded and varnished with a shining finish.	Flooring: The hardwood flooring is in moderately good condition with some areas being worn and dull.
Security level: The overall security level is below average.	Security level: The overall security level is above average.
Condition of Appliances: The condition of the appliances is approximately 6 to 20 years old.	Condition of Appliances: The appliances in the apartment are new.

TABLE 2

Study 1: Attitude and Purchase Intention as a Function of Regulatory Focus and Apartment Type

	Attitude towards Ad		Attitude towards brand		
	Apartment A	Apartment B	Apartment A	Apartment B	
Promotion	3.75 (n=18)	3.29 (n=16)	3.56 (n=18)	3.31 (n=16)	
Prevention	3.13 (n=16)	4.05 (n=19)	2.63 (n=16)	3.58 (n=19)	Note : Apar

Apartment A is Imagery while Apartment B is Analytical Type

TABLE 3

Study 2: Attitude towards Ad, Brand and Purchase Intention as a Function of Regulatory Focus and Advertisement Type

	Attitude towards Ad		Attitude towards brand		Purchase Intention	
	Imagery Ad	Analytical Ad	Imagery Ad	Analytical Ad	Imagery Ad	Analytical Ad
Promotion	6.73 (n=27)	4.19 (n=22)	6.95 (n=27)	4.97 (n=22)	6.04 (n=27)	3.55 (n=22)
Prevention	4.31 (n=20)	6.26 (n=22)	5.25 (n=20)	7.07 (n=22)	3.80 (n=20)	6.14 (n=22)

References

- Aaker, Jennifer L., and Angela Y. Lee. 2006. "Understanding Regulatory Fit." *Journal of Marketing Research* XLIII (February): 15-19.
- Arieti, S. 1976. "Creativity. The Magic Synthesis."
- Avnet, Tamar, and E. Tory Higgins. 2006. "How Regulatory Fit Affects Value in Consumer Choices and Opinions." *Journal of Marketing Research* XLIII (February): 1-10.
- Doob, L. 1972. "The Ubiquitous Appearance of Images." 311-331.
- Freitas, Antonio L., Nira Liberman, and E. Tory Higgins. 2002. "Regulatory Fit and Resisting Temptation during Goal Pursuit." *Journal of Experimental Social Psychology* 38 (3): 291-298.
- Friedman, Ronald S., and Jens Forster. 2000. "The Effects of Approach and Avoidance Motor Actions on Elements of Creative Insights." *Journal of Personality and Social Psychology* 79 (October): 477-492.
- Friedman, Ronald S., and Jens Forster. 2001. "The Effects of Promotion and Prevention Cues on Creativity." *Journal of Personality and Social Psychology* 81 (6): 1001-1013.
- Green, P E. 1984. "Hybrid Models for Conjoint Analysis. an Expository Review." *Journal of Marketing Research* (14): 19-23.
- Higgins, E. Tory. 1997. "Beyond Pleasure and Pain." *American Psychologist* 52 (12): 1280-1300.
- Higgins, E. Tory, Lorraine Chen Idson, Antonio L. Freitas, Scott Spiegel, and Daniel C. Molden. 2003. "Transfer of Value From Fit." *Journal of Personality and Social Psychology* 84 (6): 1140-1153.
- Keller, Punam Anand., and Ann L McGill. 1994
"Differences in the Relative Influence of Product Attributes Under Alternative Processing Conditions: Attribute Importance Versus Attribute Ease of Imaginability." *Journal of Consumer Psychology* 8 (1): 29-49.
- Keller, Punam., Y. Lee. Angela, and Brian Sternthal. 2004. "Construing Fit to Judgment: The Effects of Regulatory Focus and Level of Construal." *Working paper, Kellogg School of Management.*
- Kisielius, J, and B Sternthal. 1984. "Detecting and Explaining Vividness Effects on Attitudinal Judgments." *Journal of Marketing Research* (21): 54-64.
- Kisielius, J, and B Sternthal. 1986. "Examining the Vividness Controversy. An Availability-Valance Interpretation." *Journal of Consumer Research* (12): 418-431.
- Kitamura, S. 1988. "Unvivid Imagery In Vivid Reproduction." *Journal of Mental Imagery* (12): 57-62.
- Lee, Angela Y., and Jennifer L. Aaker. 2001. "'I' seek pleasures and 'we' avoid pains: The role of self-regulatory goals in information processing and persuasion." *Journal of Consumer Research* Vol.28 (Is. 1): pg. 33, 17 pgs.
- Lee, Angela Y., Jennifer L. Aaker, and Wendi L. Gardner. 2000. "The Pleasures and Pains of Distinct Self-Construals: The Role of Interdependence in Regulatory Focus." *Journal of Personality and Social Psychology* 78 (6): 1122-1134.
- Liberman, Nira, Lorraine Chen Idson, Christopher J. Camacho, and E. Tory Higgins. 1999. "Promotion and Prevention Choices Between Stability and Change." *Journal of Personality and Social Psychology* 77 (6): 1135-1145.

McGill, A L, and P Anand. 1989. "The Effect of Imagery on Information Processing Strategy in a Multi Attribute Choice Task." *Marketing Letters* (1): 7-16.

Pennington, Ginger L., Aaker. Jennifer, and Mogilner Cassie. 2005. "When Does 'Not So Bad' Seem Awfully Good? Even Proximity, Temporal Construal, and the Persuasiveness of Prevention Focus." *working paper, Graduate School of Business, Stanford University*.

Pennington, Ginger L., and Neal J. Roese. 2003. "Regulatory focus and temporal distance." *Journal of Experimental Social Psychology* 39 (6): 563-576.

Pham, Michel Tuan, and Tamar Avnet. 2004. "Ideals and Oughts and the Reliance on Affect versus Substance in Persuasion." *Journal of Consumer Research* 30 (March): 503-518.

Roese, Neal J., Taekyun Hur, and Ginger L. Pennington. 1999. "Counterfactual Thinking and Regulatory Focus: Implications for Action Versus Inaction and Sufficiency Versus Necessity." *Journal of Personality and Social Psychology* 77 (6): 1109-1120.

Shafir, Eldar, Itamar Simonson, and Amos Tversky. 1993. "Reason-Based Choice." *Cognition* 49 (October/November): 11-36.

Srinivasan, V, A K Jain, and N K Malhotra. 1983. "Improved Predictive Power of Conjoint Analysis by Constrained Parameter Estimation." *Journal of Marketing Research* (20): 433-438.

Taylor, S E, and S T Thompson. 1982. "Stalking the Elusive Vividness Effect." *Psychological Review* (89): 155-181.