ESSAYS IN REGULATORY FOCUS AND PRICE ACCEPTANCE

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ESSAYS IN REGULATORY FOCUS AND PRICE ACCEPTANCE

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To my wife Sonal, daughter Ruchira, and my parents for their unflinching support and understanding

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these values that have seen me through in my professional and academic endeavors.

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SUMMARY

Part one of the thesis studies differential diagnosticity towards substantive extrinsic information available in the environment. This research tests the interaction between regulatory focus and availability of extrinsic-substantive information such as consensus information, on the range of acceptable price. Prior research on regulatory focus led us to two divergent predictions. Our findings lend support to the asymmetric-elaboration account. Under this account, only prevention-oriented consumers are likely to change their acceptable price range if combinations of favorable-and-unfavorable consensus information are available in the environment, while promotion-oriented consumers disregard such information. We find that this difference is due to the differences in the level of difficulty experienced in specifying acceptable price range across the two regulatory foci. Further, we also undertake random-parameters regression models that provide unique general findings. For example, we find that for promotion-oriented consumers it is their high-level product construal, while for prevention-oriented consumers it is their low-level product construal that influences their respective acceptable price ranges, irrespective of level of external information available. Theoretical and managerial implications are discussed.

Part two of the dissertation discusses how consumer choices differ over a series of gains or losses. We propose that regulatory focus differences should lead consumers, with distinct regulatory foci, to display different likelihoods of integrating (segregating) a series of losses (gains). Based on this general proposition, we delve into studying the interaction between option framing and regulatory focus on consumers' options choices. In the additive (subtractive) option frame, consumers are presented with a base (fully-loaded) model and are asked to add (delete) options that they want (don't

want). In line with our theorization, we find that this interaction significantly impacts the number of options chosen, reference price, amount of time taken to make decision and the value perceived in the options chosen. However, we also find that option framing may not work with promotion-oriented consumers. Further, we show that value perceived in the options chosen mediates the relationship between regulatory focus and purchase commitment. Finally, we test the influence of amount of time taken to make the options choice, and other predictors, on the number of options chosen, using two-step maximum likelihood estimation. The theoretical and managerial implications are discussed and an agenda for future research is laid out.

Part three of the thesis looks into how consumers' prior price acceptance commitments lead to differences in information processing. We argue that if consumers commit themselves to a predetermined level of evaluation for the stimulus, then they will process information pertaining to the stimulus using only specific processing strategies. Essentially, we argue that committing to a goal is decisive in determining goal means. We specifically propose that when consumers commit themselves to a predetermined evaluation that is above (below) the market value of the stimulus, then they will consciously and/or automatically undertake processing strategies that instigate a regulatory fit (a regulatory misfit), irrespective of whether they are promotion or prevention oriented. Further, the regulatory fit or misfit instigated is purported to linger and is transferred to other objects within a reasonable timeframe. The managerial implications of these findings are discussed.

CHAPTER 1

INTRODUCTION

This research focuses on the influence of consumers' regulatory focus on their product choice and behavior. Though we study several dependent variables, a general theme that this research is dedicated to, in each of the 3 essays, is the influence of regulatory focus and specifically on consumers' price acceptance. At first, we will illustrate the importance of regulatory focus research. We will briefly highlight research that shows that the influence of regulatory focus may be more pervasive on consumer choices than may appear at first glance. We will then briefly outline our motivation for research in each of the 3 essays. This thesis is divided into 3 parts, one for each of the essays.

1.1 Regulatory Focus and Regulatory Fit

Regulatory Focus theory (Higgins 1997, Higgins & Spiegel 2004) postulates two basic motivational systems, namely the promotion system and the prevention system. The promotion system governs the needs for self-actualization, maximizing benefits, realizing ideals through increased development, and reaching a desired situation. The prevention system, in contrast, governs the needs for self-preservation, minimizing losses, meeting obligations, ensuring security and avoiding negative outcomes. Promotion orientation leads to people undertaking an eager strategy in information processing with a focus on what's to be gained and how can that be made possible. In contrast, prevention orientation leads to people undertaking a vigilant strategy with a focus on what can go wrong and how can that be avoided.

Promotion-oriented people are inherently optimistic in their outlook and prefer to look at the proverbial glass as "half full", and thus aim at reaching their goals by undertaking expansive strategies. In contrast, prevention oriented people are inherently pessimistic, and prefer to look at the glass as "half empty", and aim to meet their goals by undertaking conservative strategies. Though, it is assumed that both, the promotion and prevention systems coexist in an individual, extant research suggests that in a given context, one of these two systems is typically more accessible, either chronically, or due to priming by the task type (e.g. focus on "the gain by choosing the mug" versus "lose by not choosing the mug" Higgins et al. 2003) etc.

To illustrate in an example, a promotion-oriented individual, buying a new car, will primarily be concerned with ensuring that her car has the highest-possible acceleration performance and the best entertainment and luxury features, contemporary looks, and is for a price that her maximal car-buying budget limit permits. In signal-detection theory terms, prevention oriented individuals, are more risk-taking, and focus on maximizing hits and avoiding errors of omission, thereby relying on a smaller just-noticeable difference (JND), when making a call on whether a change has been detected. The prevention-oriented individual, buying a car, will primarily focus on ensuring that her car purchase meets at least a specific minimum level performance in the car (below which, she will not even consider buying the car) and safety equipment, for a price that is well within her car-buying budget. In signal-detection theory terms, prevention oriented individuals are more conservative, and focus on reducing errors of commission by ensuring correct rejections and avoiding false alarms, thereby relying on a bigger-but-more-accurate just-noticeable difference (JND), when making a call on whether a change has been detected.

Extant literature on Regulatory Focus theory suggests that firstly that promotion or prevention regulatory focus may be chronically held (Lockwood, Jordan and Kunda 2002 provide a scale to measure chronic regulatory focus). Secondly, the situational context (which may override the chronic focus, by priming ideals or oughts, and instigate participants to be either promotion oriented versus prevention oriented respectively) too may be varied to cause people to momentarily adapt either a promotion or prevention orientation. For example, Pham and Avnet 2004 ask their participants to think either of their past and present hopes and aspirations or their duties and responsibilities.

Extant research also suggests that regulatory focus may be situationally manipulated. Even the process of either using a product or selecting a particular product, can lead people to prefer varying products subsequently. Zhou and Pham (2004) propose that consumers have separate mental accounts for each specific task. These authors argue that each task is granted control exclusively either to the promotion system or to the prevention system, but not to both. As such, Zhou and Pham show that regulatory focus can be contextually instilled. In their study, participants, who made investment in growth-oriented risky assets, that is, in trading/brokerage accounts, because of the priming caused by this promotion-oriented activity, sought more promotion-oriented benefits and were willing to make more risky decisions, in a following-unrelated task. Conversely, participants, who made investment in security-oriented retirement assets, that is, in 401K or IRA investments, because of the priming caused by this prevention-oriented activity, sought more prevention-oriented benefits and were willing to make fewer risky decisions, in a following-unrelated task.

Regulatory focus has been found to have a strong influence on memory, product choice, willingness-to-pay and overall behavioral decision-making. Essentially, promotion-

oriented people will prefer promotion-oriented outcomes, while prevention-oriented people will prefer prevention-oriented outcomes. In reporting that regulatory focus can moderate recall, Higgins et al. (1994) show that participants, under prevention (promotion) orientation, recalled more life episodes that were related to prevention (promotion) strategies. Further, Forster Higgins and Taylor Bianco (2003) suggest that participants, under promotion focus, prefer higher speeds to higher accuracy, in comparison to participants under prevention focus.

Shah and Higgins (1997) propose that regulatory focus moderates people's reliance on expectancy value of a goal outcome. Expectancy Value Model suggests that if an individual has a high likelihood of achieving a goal, or if the value of the reaching the goal is very high, or both, then the individual will be highly motivated to achieve that goal. Shah and Higgins argue that given that promotion-oriented people focus on ideals and on maximizing returns, the higher the expectancy value of a task, the more will promotion-oriented people be motivated to undertake it. In contrast, given that prevention-oriented people focus on oughts, duties and minimizing losses, the motivation that prevention-oriented people will have in undertaking a task, will be more intrinsic and will not depend on the expectancy value of the task.

Further, Higgins (2000, 2002) has proposed the concept of regulatory fit. When people pursue a goal in a manner that sustains their regulatory focus, then they experience regulatory fit, while if people pursue a goal in a manner that conflicts with their regulatory focus, then they will experience a regulatory misfit. Experiencing regulatory fit leads to increased confidence in decision making, increased motivation and increased polarization in attitudes, while experiencing regulatory misfit leads to reduced confidence in decision-making, confusion and frustration. Based on regulatory-fit theory, one may

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conjecture that most of the effects that we have reviewed in the prior section will be strengthened if the participants were to experience regulatory fit. Likewise, those effects will be weakened, if the participants were to experience regulatory misfit.

Achieving a regulatory fit can lead people to transfer this feeling into increased monetary value for the product under consideration (Higgins et al. 2003). Promotion-oriented participants experienced a regulatory fit, when they applied a gain strategy (that is, when participants were urged to think about what they would gain by having the focal object). In contrast, prevention-oriented participants experienced a regulatory fit when they applied a lose strategy (that is, when participants were urged to think about what they would lose by not having the focal object). Regulatory misfit was rendered when opposite combinations of regulatory foci and gain/loss strategies were implemented. The decision-making process is essentially the same in both conditions. However, participants, in both promotion and prevention focus had a significantly higher willingness-to-pay for the focal object, when they experienced a regulatory fit, versus when they did not achieve a regulatory fit.

1.2 Motivation

I will now provide a brief outline for my motivation for undertaking the research in the three essays in my dissertation.

Part One
Extant research in regulatory focus has focused on the influence of message frames (gain vs. loss) on the differences in diagnosticities perceived in each message type consumers with regulatory foci. (Lee and Aaker 2004; Aaker and Lee 2001). For

example, Aaker and Lee (2004) find that promotion (prevention)-oriented consumers find gain (loss)-framed messages more persuasive. However, in addition to gain and loss framed advertising and billboard messages, consumers are also exposed to other types of external messages, the influence of which is has not been studied in regulatory focus research. For example, amazon.com provides customers access to reviews on the left by earlier customers on the usability and efficacy of the product in comparison to competing products. How consumers with distinct regulatory focus react to different types of such substantive external consensus information has yet to be studied. Part one deals with the diagnosticity of such external information that is available to consumers. Specifically, part one delves into studying the influence of the interaction between regulatory focus and external information available to consumers, on consumers' range of acceptable prices.

Part Two

Park, Jun and MacInnis (2000) study the influence of option framing on consumer choice. In the additive (subtractive) option frame, consumers are presented with a base (fully-loaded) model and are asked to add (delete) options that they want (don't want). Park et al. propose that consumers, who are presented a product in subtractive frame, should retain a relatively large number of options in the final product. In contrast, consumers, who are presented a product in additive frame, should add fewer options in the final product, than were retained in the subtractive frame. In part two, we first review how the difference in the shape of the value functions of promotion versus prevention-oriented consumers point to differences in their likelihoods to integrate losses and segregate gains. Based on this basic difference, we argue that consumers' regulatory focus should interact with option framing and thereby lead to differences in choices in options. Our theorization suggests that promotion-oriented consumers are more likely to

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choose more options and end up with a higher-priced product, than are prevention-oriented consumers, in the additive frame. In contrast, prevention-oriented consumers are more likely to retain more options and end up with a higher-priced product, than are promotion-oriented consumers, in the subtractive.

Part Three

Prior research suggests that consumers' motivation level determines whether regulatory fit occurs. Wang and Lee (2006) propose that, under low levels of involvement, consumers actively create regulatory fit by preferentially seeking out and elaborating specifically on information that creates a regulatory fit condition, over information that creates a regulatory misfit. However, under high levels of involvement, consumers give relatively high weight to substantive information, rather than preferentially seeking that information that helps them achieve regulatory fit. Extant research, however, lacks insight into whether consumers are also likely to render a regulatory misfit under specific conditions, just as they are able to render a regulatory fit under specific conditions. Part three is dedicated to filing this void in extant literature. I argue that committing to a goal is decisive in determining goal means. Part 3 purports that when consumers commit themselves to a predetermined evaluation that is above (below) the market value of the stimulus, then they will consciously or automatically undertake processing strategies that instigate a regulatory fit (a regulatory misfit), irrespective of whether they are promotion or prevention oriented.

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PART ONE

DIFFERENTIAL DIAGNOSTICITY FOR EXTRINSIC INFORMATION: A

REGULATORY FOCUS PERSPECTIVE

CHAPTER 2

INTRODUCTION TO PART 1

In this research, we focus on an important-but-understudied construct, namely, the range of acceptable prices (also referred to as the latitude of price acceptance). Much prior research points to the support for the range of acceptable prices conceptualization of reference price (Ofir 2004; Janiszewski and Lichtenstein 1999; Niedrich, Sharma and Wedell 2001; Rao and Sieben 1992, Kalyanaram and Little 1994; Lichtenstein et al. 1988; Kalwani and Yim 1992; Kalyanaram and Winer 1995; Mazumdar and Jun 1992; Wang, Venkatesh and Chatterjee 2007). Bell and Lattin (2000) propose that consumers use not only the single-point reference price standard in absolute terms (also referred to as the adaptation level), but also the deviations from this reference price. This deviation from the mean reference price is the foundation for the range of acceptable prices. Lichtenstein, Bloch and Black (1988) suggest that price acceptability is positively related to the width of the range of acceptable prices. The single-point reference price and the upper-and-lower limit based acceptable price range are akin to two dimensions of a latent conceptualization of reference price, and they are correlated with each other (Lichtenstein et al. 1988; Urbany and Dickson 1991). While the single-point reference price conceptualization is based on adaptation-level theory, the latitude of price acceptance (that is, the range of acceptable prices) conceptualization of reference price is based on social-judgment theory and weber-fechner law. Petroshius and Monroe (1987) argue that buyers have a range of acceptable prices for every prospective purchase. Extant research also suggests that consumers' exposure to price variations in the marketplace results in a set of prices that they consider acceptable (Monroe and Lee 1999).

Additionally, extant research in regulatory focus theory provides us guidance on how regulatory focus and regulatory fit can influence willingness-to-pay (Higgins et al. 2003). However, research, on how distinct regulatory foci influence the range of acceptable prices, is lacking. The current research attempts to fill this void. However, in addition to the influence of regulatory focus alone (which can be either chronic or induced situationally, Zhao and Pham 2007), consumers are also exposed to external information on the target product through voluntary and involuntary exposure to store environment or to product advertising etc. Often, product sales website, like amazon.com present the consumer with much extrinsic-factual information about the target product and competing products. Amazon.com, for example, provides customers access to customer reviews where in prior customers present product recommendations for target products over competing products given that the target product may better fulfill customer needs or vice versa. Additionally, consumers also have access to factual information such as the proportion of consumers, who viewed the current product, ended up buying that same product or the competing product. We refer to such extrinsic information as the extrinsic need-fulfillment-ability information on the product.

In this research, we study how consumers' regulatory focus interacts with such extrinsic information, which is often available in the environment, and which potentially influences the acceptable price range width. Specifically, we will study how the upper limit of the acceptable price range (that is, the highest acceptable price for the product) and the lower limit of the acceptable price range (that is, the lowest acceptable price for the product) are influenced by regulatory focus and availability of external information on the product. Our primary goal is to study how the presence or absence of favorable and

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unfavorable need-fulfillment-ability information on the product influence changes in price acceptance versus when such information is absent.

This paper is laid out as follows. First we review research in acceptable price range. Then, we review research in regulatory focus theory which points to two accounts that indicate divergent hypotheses. Under the first account, which we refer to as the "regulatory-fit account, both promotion and prevention-oriented consumers consciously attend to different information that help them specify their acceptable price range. Under the second account, which we refer to as the "asymmetric-elaboration" account, only prevention-oriented consumers consciously attend to information that they consider important, while promotion-oriented consumers undertake affect-based processing and do not elaborate on substantive information available in the environment. Our analyses indicate support for the "asymmetric-elaboration" account. We then attempt to check whether systematic differences in highest acceptable price leads to systematic differences in the correlates of price acceptability, namely, price consciousness and price-quality inferences (Lichtenstein et al. 1988). We end with theoretical and managerial implications.

CHAPTER 3

ACCEPTABLE PRICE RANGE

It has been argued in the preference-uncertainty literature that a single-point reference price representation presumes that consumers know with certainty as to how much they are willing to pay for one unit of the product. Hence, this literature suggests that it is more likely that consumers do not have a well-defined preference structure to make evaluations based on a single-point reference price alone. In the presence of uncertainty, consumers often consider and recall a range of prices. Additionally, Janiszewski and Lichtenstein (1999) propose that consumers' price acceptability assessments entail comparing product price with comparison of the market price to the endpoints of the evoked price range. Consumers are said to find a price acceptable if it lies within an evoked acceptable price range, whose limits are often based on current variation in market prices. Most consumers are unable to identify the exact price that they paid for a product last time they bought it. However, most consumers are able to specify a general range of prices that they experienced during last purchase. All this evidence is assumed to suggest that consumers may actually harbor a range of acceptable prices, which they use as their reference price anchor (Monroe 1973).

However, individual differences exist in consumers' range of evoked acceptable prices (that is, latitude of price acceptance), just as differences may exist in their single-point reference prices (that is, in adaptation level price). Hence, two consumers, who have identical adaptation level prices, may still display differences in price acceptability, given that their range of acceptable prices may be different. Lichtenstein et al. (1988) and Monroe (1973) propose that for some consumers, a price may be high-but-acceptable

(that is, specified price is close to but below the upper limit of the acceptable price range) while to others it may be unacceptably-high (that is, specified price is above upper limit of the acceptable price range). Alternatively, two different consumers, who hold the same adaptation-level reference price, may be conforming to significantly different range widths of acceptable prices, thus displaying significantly different price acceptability. Such fine distinction cannot be made when studying price acceptance using a single-point (adaptation level) reference price concept alone. A range of acceptable prices conceptualization of reference price provides a richer insight into consumer price sensitivity, than can be provided by a single-point reference price conceptualization.

Additionally, extant research suggests that the range explanation of reference prices may provide a superior explanation of price acceptance than is provided by a single value adaptation level explanation. For example, Janiszewski and Lichtenstein (1999) find that the endpoints of consumers' evoked price range mediate the changes in price attractiveness ratings, whereas the single-point internal reference price did not. On similar lines, Niedrich et al. (2001) propose that range-frequency theory based acceptable-price range provides a better explanation for reference-price effects that the adaptation-level theory based single-point reference price. Finally, Wang, Venkatesh and Chatterjee's (2007) study suggests that price range is a better predictor of consumers' willingness-to-pay than single-point reference price, given that consumers' price range has the least shift in choice likelihood, as compared to that in single-point reference price, or other comparable measures of willingness-to-pay. Hence, a study of determinants and moderators of acceptable price range is relevant to understanding consumer price acceptance phenomenon.

Given this, it is important for researchers to understand how two limits of consumers'

acceptable price range behave in reaction to the presence or absence of combinations

of favorable and unfavorable extrinsic information on the product, versus when such

information is absent. As such, this forms the primary intention of this research. To

understand this, we intend to study the changes in the price acceptance levels of

consumers when they are presented in 4 distinct information-availability conditions.

These information conditions are presence of favorable information only (for example,

presence of a bunch of product reviews which overwhelmingly suggest that the target

product is more useful than the competing product), presence of unfavorable information

only (for example, presence of a bunch of product reviews which overwhelmingly

suggest that the target product is less useful than a competing product), presence of

both favorable and unfavorable information, and absence of any such information.

In the current research, we will follow Monroe's (1971) acceptable price range

conceptualization, where the lower limit of the price range need not be zero dollars.

On similar lines, Ofir (2004) suggests that certain consumers' acceptable price

thresholds can be represented by an inverted U-shaped price acceptability function with

clearly-defined upper and lower price limits. Such consumers find very low prices

unacceptable because such prices suggest low product quality. In contrast, other

consumers may not have a natural lower price limit, while simultaneously having an

upper price limit. For such consumers, "lower price is better," may be more

representative of their price-acceptability function. To overcome this problem where

consumers may or may not have a lower price limit, our experimental method induces a

procedure where consumers will have a lower price limit. We don't just ask our

participants to provide us their lower price limit. Rather, we induce a situation which will

elicit a meaningful lower price limit in most participants. If our procedure of eliciting a

lower price limit in our participants is successful, then the lower price limit specified by our participants, should be significantly higher than $0. On the other hand if our procedure is not successful, then the lower price limit that our participants specify may be close to $0 and may not even be significantly larger than $0.

Lichtenstein et al. (1988) and Ofir (2004) have argued that consumers' price consciousness and price-quality relationship inferences are two relevant antecedent-correlates of price acceptance. Consumers who harbor low levels of price consciousness should be more willing to pay higher for a product that they believe is more appealing. As such, consumers' price consciousness is negatively correlated to consumers' price acceptance. Price-quality inference refers to consumers' belief that high price is an indication of high quality. Consumers, who hold high levels of price-quality relationship, are more willing to render higher price acceptable for products, as they believe that high-priced products are bound to be of higher quality. Further, such consumers should not find very low product prices acceptable, as the low price of such products indicates low product quality (Monroe 1973).

This suggests that consumers, who display increased highest acceptable price under specific conditions such as presence of favorable extrinsic product information, are displaying increased should flexibility in their price acceptance behavior, in comparison to the condition where such information is not present. Extant literature suggests such consumers tend to harbor increased price-quality inferences or reduced price consciousness or both, under such specific conditions. We can also draw similar inferences for the other 3 conditions. This research is focus on testing support for this occurrence.

This research also focuses an understanding the types of consumers who will find extrinsic need-fulfillment-ability information on the product to be pertinent to their price-acceptance decision-making. Such consumers should find the presence of unfavorable extrinsic information about a product to be diagnostic. The presence of such unfavorable information may induce uncertainty about the product, and hence such consumers may discount the product's capabilities (Ford and Smith 1987, p. 363), and will infer lower quality for the product. This should lead these consumers to specify a reduced highest acceptable price limit (Rao and Sieben 1992 p. 259). On similar lines, consumers, who find extrinsic-product information important in their decision-making, should also find the presence of favorable extrinsic information about a product to be significant. The presence of such favorable information will cause such consumers to infer higher quality for the product. Hence, such consumers may tend to display higher highest acceptable price.

In contrast, we argue that consumers, who do not find extrinsic need-fulfillment-ability information on the product to be important, will not display changes in price acceptability levels in the presence or absence of extrinsic need-fulfillment-ability information on the product. For such consumers, one can infer that their price acceptability levels will hold at the same levels, irrespective of whether favorable and unfavorable need-fulfillment-ability information on the product is present or absent.

Further, we believe that for consumers, who find such extrinsic information on the need-fulfillment ability of the product to be important, the presence of favorable extrinsic-product information should influence the upper price limit positively, in contrast to when such information is not present. Likewise, the presence of unfavorable extrinsic-product information should influence the upper price limit negatively for such consumers, in

contrast to when such information is not present. We argue however, such precise inferences cannot be made for the lower price limit of the price range, in the presence or absence of favorable and unfavorable extrinsic information.

Firstly, prior literature does not provide us clear guidance on whether the presence of favorable or unfavorable extrinsic information influences the lower price limit, in comparison to when such information is not present. We argue that it is not clear whether the presence of unfavorable information (and thereby increase in uncertainty in product quality) leads to increasing or to lowering of the lower price limit. As discussed earlier, the lower price limit is a threshold below which the consumer assumes that the product has unacceptably low quality. In the face of increased uncertainty, one perspective will suggest that the consumer will look to increase the lower price limit in the hopes of buying a more expensive product so as to ensure that it has higher quality. However, one also contend that in the face of increased uncertainty on quality, the consumer may actually lower the lower price limit given that that lower price may just be the right price to pay for that low-quality product. Likewise, neither is it clear whether the presence of favorable information (and thereby decrease in uncertainty in product quality) leads to increasing or to lowering of the lower price limit.

Secondly, from a managerial standpoint of revenue maximization, having a clear understanding of the behavior of consumers' highest price limit may be more important than understanding the behavior of their lower price limit. Given these reasons, we choose to focus mainly on the influence of the presence or absence of favorable and unfavorable information on consumers' upper price limit, in drawing our hypothesis. We will rely on the results of our study, to gain insight on how the lower price limit and the width of the acceptable price range are influenced by the interaction between the

consumers' regulatory focus and presence or absence of extrinsic favorable and unfavorable extrinsic-product information.

We will assess participants' price acceptance based on their highest acceptable price (that is, upper price limit), their lowest acceptable price (that is, lower price limit) and their width of the acceptable price range (the latitude of price acceptance, calculated by deducting the lower price limit from the upper price limit). We provide the price of a competing product[1], so as to provide a reference price level (adaptation price level) for the stimulus,

The next question to be covered is under what circumstances will consumers find the presence of extrinsic need-fulfillment-ability information on the product to be diagnostic to their price acceptance, versus when such information is absent. In the next section, we review literature in regulatory focus theory. We propose that differences in regulatory focus should lead to differences in the diagnosticity for such extrinsic product information.

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[1] Our procedure of eliciting acceptable price range is the similar to the procedure laid out by Lichtenstein et al. (1988). Like them, we asked participants to specify the most and the least that they will pay for the product. However, our procedures differ slightly in the context of the single-point reference price. Lichtenstein et al. ask participants to provide a measure of their participants' price adaptation level by making the participants specify the amount that they pay for the stimulus typically and on average. Essentially, Lichtenstein et al. rely entirely on consumers' internal reference-price schema to evoke the price acceptability construct. In contrast, we provide consumers with a single-point reference price by informing them the price of a closely-competing product. Based on the procedure laid out in Rao and Sieben (1992), we argue that, in reality, the shopping environment will invariably provide consumers with external reference prices, which will in turn help them in eliciting their upper and lower price limits. Hence, we believe that relying on consumers' utilizing the price available in the environment in eliciting upper and lower price limits may afford us increased external validity.

CHAPTER 4

REGULATORY FOCUS THEORY

Regulatory Focus theory (Higgins 1997, Higgins 1998) postulates two basic motivational

systems, namely the promotion system and the prevention system. The promotion

system governs the needs for self-actualization, maximizing benefits, realizing ideals

through increased development, and actively achieving a desired goal. The prevention

system, in contrast, governs the needs for self-preservation, minimizing losses, meeting

obligations, ensuring security and avoiding negative outcomes. Hence, a promotion-

oriented CEO attempts to improve her firm's profits by focusing mainly on increasing

revenue-generating opportunities of her firm. For such a CEO, new avenues of revenue

generation will be more diagnostic in their decision-making. In contrast, a prevention-

oriented CEO attempts to improve her firm's profits by focusing on mainly reducing costs

and expenses that her firm undergoes, and hence will find cost-saving opportunities to

be highly diagnostic to her decision making.

Higgins (2000, 2002) has further proposed the concept of regulatory fit. Higgins argues

that when people pursue a goal in a manner that sustains their regulatory focus then

they experience regulatory fit, and if people pursue a goal in a manner that conflicts with

their regulatory focus then they will experience a regulatory misfit. Experiencing

regulatory fit leads to increased confidence in decision making, increased motivation and

increased polarization in attitudes, while experiencing regulatory misfit leads to reduced

confidence in decision-making, confusion and frustration.

Avnet and Higgins (2006) suggest that people feel better (that is, they experience

fluency and ease in information-processing) when they use strategies that fit their

regulatory focus. Experiencing regulatory fit leads people to achieve a "feeling right" state, which leads to increased confidence in decision making. After experiencing a fit, people heuristically misattribute this perception of "feeling right" to the decision-making process, in assuring themselves that their decisions are correct. Winkielman and Cacioppo (2001) propose that information-processing ease is marked hedonically. They suggest that processing fluency, caused due to the ease in processing information, can draw positive affect, which in turn, can lead to positive judgments. Higgins (2006) proposes that once people experience regulatory fit it leads to increased intensity of attraction, if the target object is attractive, and to increased intensity of repulsion, if the target object is unattractive.

Achieving a regulatory fit can lead people to transfer this feeling good experience into increased monetary value for the product under consideration (Higgins et al. 2003). Promotion-oriented participants experienced a regulatory fit, when they applied a gain strategy (that is, when participants were urged to think about what they would gain by having the focal object). In contrast, prevention-oriented participants experienced a regulatory fit when they applied a lose strategy (that is, when participants were urged to think about what they would lose by not having the focal object). The decision-making process is essentially the same in both conditions. However, participants, in both promotion and prevention focus had a significantly higher willingness-to-pay for the focal object, when they experienced a regulatory fit, versus when they did not achieve a regulatory fit. In continuation of Higgins et al.'s line of research, the current research looks into how achieving regulatory fit, versus not achieving regulatory fit, affects consumers' range of acceptable prices.

CHAPTER 5

SELECTIVE FOCUS ON IFORMATION THAT HELPS SUSTAIN REGULATORY

FOCUS – REGULATORY FIT ACCOUNT

In this section, we will review relevant literature in the domain of regulatory-fit theory. We refer to the review and predictions offered in this section as the "regulatory-fit" account for differences in information diagnosticity.

In any given situation, we expect that promotion and prevention-oriented consumers should put in fairly-equal level of energy in information search, if they believe that that information will help them achieve their goals (Pham and Higgins 2005). Further, Pham and Higgins argue that the information search undertaken by promotion-oriented individuals may actually be more elaborate than that undertaken by prevention-oriented individuals, given that promotion-oriented individual don't want to miss opportunities and hence err on the side of minimizing errors of omission. This theorization presumes that the promotion-specific information should be diagnostic to promotion-oriented individuals in achieving their goal of advancement, while prevention-specific information should be diagnostic to prevention-oriented individuals in achieving their goal of reducing risk.

Extant research shows that researchers have been able to instill a regulatory fit in their participants by enabling situations or by laying out goals for their participants, which help sustain their participants sustain their regulatory foci. As discussed earlier, experiencing regulatory fit leads to higher assessment of the target. For example, Lee and Aaker (2004) find that people in promotion orientation are more persuaded by messages that highlight the gain frame (e.g. "Get energized"), while prevention oriented people are

more persuaded by messages that highlight the avoidance of the loss frame (e.g. "Don't miss out on getting energized").

Additionally, Pham and Higgins (2005) propose that given that promotion focus is depicted by eagerness at achieving a desired end, they focus on looking for positive information available to them. Conversely, prevention-oriented people focus on avoiding mismatches to their desired goal, and hence focus on looking for negative information available to them.

Further, extant research also points to situations where consumers can themselves selectively elaborate on information that enables them to achieve regulatory fit. For example, Wang and Lee (2006) extend regulatory-fit theory further by testing the constructive preference view (Payne, Bettman and Johnson 1992), which suggests that given people's limited ability to process all available information, people selectively focus only on partial information, as they believe is required in order to solve the problem. This is also supported by cognitive dissonance theory (Festinger 1957), which suggests that people look specifically for select information which supports their current beliefs.

Wang and Lee argue that people, with low levels of involvement, choose to focus only on partial information (presented either in promotion-focus frame or prevention-focus style), that helps them achieve a regulatory fit, leading to higher product evaluation, given that regulatory fit is achieved. Thus, it is suggested that at low levels of involvement, promotion-oriented (prevention-oriented) people will selectively give more weight to information that pertains to growth and advancement (security and safety), and hence achieve a regulatory fit. In the current research, given that we will not be

manipulating the involvement level of participants, we will be presuming that all our participants will be operating at low levels of involvement and motivation.

In their study, Wang and Lee presented participants with two toothpastes – toothpaste A had strong promotion and weak prevention claims, while B had strong prevention claim and weak promotion claims. Wang and Lee show that given a choice, promotion-focused (prevention-focused) participants, under low levels of involvement, chose toothpaste A (toothpaste B) and provided a higher evaluation to their chosen toothpaste. This is the case, as in doing so, participants experienced regulatory fit. Based on the literature we have reviewed so far, we assume that both promotion and prevention-oriented consumers will actively and consciously look mainly for material information in the environment, and will even facilitate experiencing regulatory fit.

Given Pham and Higgins's proposition that promotion-oriented consumers focus on looking for positive information available to them, we expect that in the condition where only favorable product information is available, it will be promotion-oriented consumers who find this information diagnostic as it helps them sustain their focus on advancement (being able to own a product that is going to fulfill their needs). Favorable information on the target product should help promotion-oriented consumers sustain their focus on their advancement agenda and should increase the product's value. This regulatory-fit condition should push the upper limit of the range of acceptable prices upwards for promotion-oriented participants. Prevention-oriented consumers, in contrast, will find this information relatively less appealing as it does not help them sustain their focus on avoiding problematic products. Hence, in this perspective, we don't foresee any reason to argue that prevention-oriented participants' upper limit of acceptable price range will be pushed upwards in this condition.

In contrast, promotion-oriented consumers under the condition when no information is present, do not get to experience regulatory fit, and hence there is no reason to believe that their upper limit of their acceptable price range will rise. This implies that we expect promotion-oriented consumers, under the condition when only favorable information is available, to have an upper limit of their acceptable price range that is higher than that for promotion-oriented consumers under the condition where no information is present (the control condition). As discussed earlier, extant literature does not provide us clear guidance on how the lower limit for promotion-oriented consumers is influenced under condition when only favorable information is available, versus when no external information is available. Hence, we are not in a position to make a conjecture on whether the presence of favorable information will change the lower price limit for promotion-oriented consumers versus when favorable information is absent.

Further, we do not expect such differences with prevention-oriented consumers. Prevention-oriented consumers, in the condition when only favorable information is available, should have similar upper limits to their acceptable price range, as those for prevention-oriented consumers, who are not presented with any information.

In the reverse condition, when only unfavorable information on the product is made available, we expect that it is the prevention-oriented consumers who find this information diagnostic as this helps them sustain their focus on security (being able to avoid a product that might be problematic). Again, this is based on Pham and Higgins's proposition that prevention-oriented consumers focus mainly on looking for negative information available to them. This regulatory-fit condition should push the upper limit of the range of acceptable prices downwards for prevention-oriented participants.

Promotion-oriented consumers, on the other hand, are not expected to find this information diagnostic given that it does not help sustain their focus on advancement. Hence, we don't foresee any reason for promotion-oriented participants' lower limit of acceptable price range to be pushed downwards, in this condition.

In contrast, prevention-oriented consumers under the condition when no information is present, do not get to experience regulatory fit, and hence there is no reason to believe that the limits of their acceptable price range will fall. We thus expect prevention-oriented consumers, in the condition when only unfavorable information is available, to have a upper limit of their acceptable price range to be lower than that for prevention-oriented consumers, when no information is present (the control condition).

Further, we do not expect such differences with promotion-oriented consumers in this case. Promotion-oriented consumers, in the condition when only unfavorable information is available, should have similar upper and lower limits as those for promotion-oriented consumers, who are not presented with any information.

In the condition, where both, favorable and unfavorable information on the product (for example, one group of customer reviews which suggests that the target product is more useful than the competing product, and a second group of customer reviews that the target product is less useful than the competing product) is made available, then we expect different outcomes. In such a situation promotion-oriented consumers should find favorable information diagnostic, and (based on Wang and Lee 2006) should disregard the unfavorable survey, as focusing only on the favorable information helps them sustain their focus on advancement. This should push the upper limit of the range of acceptable prices upwards for promotion-oriented participants.

Similarly, under such a condition, we expect that prevention-oriented consumers should find unfavorable information diagnostic and that they should disregard the favorable survey, as focusing on the unfavorable information helps them sustain their focus on avoiding mistakes. This should push the upper limit of the range of acceptable prices downwards for prevention-oriented participants.

Hence, we expect promotion-oriented consumers, in the condition when both favorable and unfavorable information is available, to have a higher upper limit to their acceptable price range than that of promotion-oriented consumers, when no information is present. Likewise, we expect prevention-oriented consumers, in the condition when both favorable and unfavorable information is available, to have lower upper limit for their acceptable price range than that of prevention-oriented consumers, when no information is present.

Given this discussion, we propose a generalized hypothesis that accounts for all these predictions that we have made, assuming the regulatory-fit account:

H1: Systematic differences in the upper limit of acceptable price range for both promotion-oriented and prevention-oriented consumers across the 4 conditions (presence of favorable information only, presence of unfavorable information only, presence of both favorable and unfavorable information, and the absence of any information). These systematic differences in the acceptable price range will be a result of the upward push of the upper limit for promotion-oriented consumers in the presence of favorable extrinsic information on the product, and of the downward push on the upper

limit for prevention-oriented consumers in the presence of unfavorable extrinsic

information o the product.

In contrast to these predictions outlined here, there is some evidence offered by prior research in regulatory-focus, which points to some very different predictions. In the next section, we review these other findings, and present an outline of predictions based on that review. Unlike the literature reviewed for the "regulatory-fit" account, the review in the next section findings from regulatory focus research doesn't rely on regulatory fit as the means of explaining the differential diagnosticity of environmental information. Rather, they rely simply on inherent information-processing differences across the two regulatory foci.

CHAPTER 6

SYSTEMATIC VS. HEURISTIC INFORMATION PROCESSING – ASYMETRIC ELABORATION ACCOUNT

We refer to the contrasting predictions offered by other research in regulatory focus, as the "asymmetric elaboration" account of differential diagnosticity for extrinsic information. In this section, we will review relevant prior findings in regulatory focus theory, but those that are outside the domain of regulatory fit and constructive preference.

Pham and Avnet (2004) propose that given their eagerness in exploring new means of achieving their goals, promotion-oriented consumers tend to rely more on their internal knowledge schema in their decision-making. This leads promotion-oriented consumers to undertake heuristic modes of information-processing leaning towards making gut-based judgments which include forming impression based on their affective associations with the stimulus, while disregarding substantive-extrinsic inputs about the stimulus.

In contrast, given their vigilant tendencies, prevention-oriented consumers tend to rely more on external and substantive information available in the environment. Such consumers are more likely to undertake detailed bottom-up processing, that is, they rely on extrinsic information about the stimulus in forming an impression. Prevention-oriented consumers seem to presume that extrinsic-substantive information may be safer to depend on in decision-making, given that it is a better predictor of the actual worth of the stimulus. We make the assumption that our participants will consider the kind of the extrinsic need-fulfillment-ability information on the product to be substantive.

Additionally, extant research suggests that promotion-oriented consumers want to look to get as much done as possible, given their inherent eagerness to minimize errors of omission, and hence tend to focus on speed at the cost of reduced accuracy (Förster, Higgins and Bianco 2003). This instills in them a tendency to undertake more superficial in the processing of information. In contrast, prevention-oriented people look in detail at different aspects of their assignments more carefully, given their inherent vigilance at minimizing errors of commission, and hence tend to focus more on accuracy at the cost of efficiency and speed.

Further, promotion-orientated consumers, given their increased likelihood of harboring an independent self construal (Aaker and Lee 2001), depend mostly on personal preference and on internal-knowledge structures, in decision making and choices (Pham and Higgins 2005). Conversely, Pham and Higgins argue that prevention-oriented consumers, given their increased likelihood of harboring an interdependent self construal, tend to look for their choices and decisions that are necessarily norm-appropriate and in line with group preferences.

This review suggests that promotion-oriented consumers may not find the different types extrinsic information (favorable, unfavorable and both favorable and unfavorable) to be diagnostically different from when such information is absent. Hence, the upper price limit for promotion-oriented consumers should not vary across these 3 conditions and thereby should be the same as it is in the control condition where information is not made available to them.

In contrast, we can expect prevention-oriented consumers to find need-fulfillment ability information on the product to be highly diagnostic. Given their inherent tendency to be

vigilant, we can expect that in the condition where only unfavorable information is present, the upper limit of prevention-oriented consumers' acceptable price range will be pushed downwards, in comparison to the control condition where information is absent.

Prior work also provides us some guidance in how prevention-oriented participants will construe the favorable information. Pham and Higgins (2005) propose that prevention-oriented individuals are more conscious about aligning themselves with the group preferences. This implies that prevention-oriented should also find the favorable information to be diagnostic in specifying their acceptable price range. Additionally, Chernev (2004 A) argues that prevention-oriented consumers have a strong predilection to choose the default option, over choosing an untested option. We make the assumption that choosing a product, associated with favorable product information, can be construed as opting for the default option. Further, favorable information about the product may also signal reduced risk. Hence, we propose that in the conditions where only favorable information is present, the upper limit of the acceptable price range of prevention-oriented consumers is likely to be pushed upwards, in comparison to that in the condition where information is absent.

It is difficult to predict how prevention-oriented consumers will react in the condition where both, favorable and unfavorable information is available. Given that prevention-oriented consumers tend to be vigilant, we suspect that they may find the unfavorable information to be diagnostic, and may disregard the favorable information.
If this situation holds, then the upper limit of the acceptable price range of the prevention-oriented consumers may be pushed lower, in comparison to that in the condition where information is absent. If however it so happens that prevention-oriented consumers give equal credence to both favorable and unfavorable information, it is

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difficult to predict how the upper price limit of prevention-oriented consumers may be impacted.

Hence, in contrast to the predictions based on the regulatory-fit account, the asymmetric-elaboration account suggests that only prevention-oriented consumers find the extrinsic need-fulfillment information on the product to be diagnostic. In contrast, promotion-oriented consumers tend to not find this information diagnostic in specifying their highest acceptable price.

To summarize, the "asymmetric-elaboration" account predicts that, given their tendency to rely on internal-knowledge structures, promotion-oriented consumers will have similar upper price limits of the acceptable price range, across the 4 information-availability conditions. In contrast, for prevention-oriented consumers, systematic differences in the upper limit of the acceptable price range will exist across the 4 information-availability conditions.

Given this discussion, we propose a rather generalized hypothesis that summarizes all the predictions that we have made, assuming the "asymmetric-elaboration" account. Given that these predictions are divergent from those outlined in hypothesis H1, we refer to them as $H1_{alternate}$:

$H1_{alternate}$: *Systematic differences in the range of acceptable prices will be observed only for prevention-oriented consumers but not for promotion-oriented consumers, across the 4 conditions (presence of favorable information only, presence of unfavorable information only, presence of both favorable and unfavorable information, and the absence of any information). These systematic differences in the acceptable price range*

for prevention-oriented consumers will be a result of the upward push of the upper limit of the acceptable price range, in the presence of favorable extrinsic information on the product, and of the downward push on the upper limit in the presence of unfavorable extrinsic information on the product.

It is important to note that though hypotheses H1 and $H1_{alternate}$ hypothesize significance of any contrasts of mean values for the dependent variable, across the 4 information conditions, taken two at a time. However, the primary focus of this research is to understand the difference in means of dependent variables for the condition where extrinsic information is absent and the means for the other information conditions. Hence, in analyzing our results, we will look to study both support for H1 over H1alternate (or vice versa) and also the contrast of difference in means of dependent variables for the condition where extrinsic information is absent and the means for the other 3 information conditions, where different combinations of information are present.

Next, we focus on the reason for this differential information diagnosticity across the regulatory foci, under the "asymmetric elaboration" account. The asymmetric-elaboration account suggests that the difference in information-processing styles between promotion and prevention-oriented consumers may lead to the differences in the range of acceptable prices across the two groups. Specifically, promotion-oriented consumers are said to rely on their internal knowledge and hence they do not find extrinsic information of any kind to be diagnostic. In contrast, prevention-oriented consumers rely on systematic information processing and hence find such available information to be diagnostic.

Hence, if hypothesis H1$_{alternate}$ holds then, it is important to understand the reason this difference in heuristic versus systematic information processing. A general recognition in cognitive psychology literature is that if a task is deemed easy, response to that task may occur below the threshold of conscious awareness. However, if unexpected difficulty is encountered in performing the task, then that task can be consciously performed under systematic processing (Barr 1988). Baar (1997) argues that consciousness is a "*facility for accessing, disseminating and exchanging information, and for exercising global coordination and control*". Additionally, Dehaene and Naccache (2000) review literature that purports that certain stimuli can heuristically and unconsciously capture conscious attention.

In line with discussion, we conjecture that given that promotion-oriented consumers go mainly with their affective associations, they may be finding the task of specifying the acceptance price levels to be relatively easy and hence may be undertaking relatively heuristic means of information processing. As such, they may not need rely on extrinsic information in coming up with their price range. In contrast prevention-oriented consumers may be finding the task of specifying the acceptable price range to be difficult. Hence, prevention-oriented consumers may consciously start looking for additional information that can help them accomplish this task. Alternatively, in line with Dehaene and Naccahe (2000), need-fulfillment ability information on the product may be the type of stimulus that is capable of drawing conscious attention of prevention-oriented consumers. Hence, if hypothesis H1$_{alternate}$ holds then, we propose that prevention-oriented consumers should experience higher level of difficulty in specifying the range of acceptable prices than that experienced by promotion-oriented consumers. Hence we propose the hypothesis:

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H2: Prevention-oriented consumers, versus promotion-oriented consumers, should find the task of specifying the price range to be more difficult

It is important to note that testing for hypothesis H2 becomes relevant only if support is established for hypothesis H1$_{alternate}$. We will test this model and the validity of hypotheses H1 and H1$_{alternate}$ by using data collected by running an experimental with 2 (Regulatory Focus: Promotion VS. Prevention) X 4 (Information-Condition: presence of favorable product information only VS. presence of unfavorable product information only VS. presence of both favorable and unfavorable product information VS. absence of any information) between-groups design.

In order to glean a broader view of the two distinct accounts (regulatory-fit vs. asymmetric-elaboration) that we have identified, we reviewed all the relevant papers in regulatory-focus research (undertaken by Marketing researchers in Journal of Consumer Research, Journal of Marketing Research and Journal of Consumer Psychology, and the Journal of Personality and Social Psychology, from 2000 to early 2008), such that their substantive findings of which could have been interpreted as lending support to either of the two accounts. We identified 30 such papers and listed their substantive findings in table 1. Further, we reinterpreted their substantive findings to the context of the current research, where it was necessary to do so. Whenever it was possible, we also provided a conjecture of how the upper limit of the acceptable price range will be impacted, based the findings laid out by the paper.

Table 1
Extant Literature Findings – Account Support & Range Limit Predictions

Sr #	Authors (Year)	Substantive Finding Pertaining To Regulatory Focus	Re-Interpretation Of Findings In The Context of Current Research (if required)	Paper Supports Regulatory-Fit Account Or Asymmetric Elaboration Account Or Not Applicable	Based On Substantive Findings In The Paper, Our Conjecture On How Upper Limit (U) And Lower Limit (L) Of Acceptable Price Range, Will Be Impacted. Note: Most inferences will be made in the context of U, as extant research does not provide clear guidance on how L will be influenced under different circumstances
1	Kirmani & Zhu (2007)	Compared with promotion focus, prevention focus increases consumers' vigilance against persuasion in a message. Prevention focus, versus promotion-focus, causes consumers to easily sense seller's persuasion efforts. Kirmani and Zhu argue that depth-of-processing does not cause these differences – only regulatory focus differences do.	Prevention-oriented consumers consciously monitor persuasion attempt, while promotion-oriented consumers do not.	Asymmetric-Elaboration Account	For prevention-focus consumers, both, U may plummet, for the target item in the presence of a potential persuasion situation. U for the target item in the case of promotion-oriented consumers may not be affected, despite presence of persuasion tactics.
2.	Zhao & Pechman (2007)	A fit between the approval-based-promotion orientation and positive-favorable direction of a message is more effective at influencing smoking behavior of participants who are chronically pre-disposed to promotion-orientation. Conversely, a fit		Regulatory-Fit Account	U may move upwards for situationally-relevant products such as smoking aids, for both promotion and prevention-oriented consumers, in the presence of advertising

		between the disapproval-based-prevention orientation and negative-unfavorable direction of a message is more effective at influencing smoking behavior of participants who are chronically pre-disposed to prevention-orientation.			messages that help them achieve a regulatory fit. Conversely in poor fit conditions (eg. Promotion-oriented consumers being presented with prevention-focused negatively framed message), U move downwards.
3.	Sengpupta & Zhou (2007)	This research attempts to explain the process involved in impulsive-consumption desire for high-calorie foods. Impulsive eaters, versus non-impulsive eaters, possess a powerful connection between hedonically-appealing foods and promotion focus – activation of longing for such food leads to reflexive promotion-focus activation that is, a focus on the potential upside of fulfilling the desire for consuming such food, with little consideration for the ill consequences that such food can have on health. Further, situational induction of prevention focus can subside this tendency. Essentially, promotion-regulatory focus mediates the relationship between impulsivity and behavioral intention.	Impulsive eaters are overtaken by promotion-orientation and hence tend to focus automatically on the immediate gains in fulfilling desires. In contrast, induction of prevention-orientation may lead to conscious elaboration of the down side of consuming food impulsively.	Closer to Asymmetric-Elaboration Account	If an activity or situation enhances the desirability of an object, then U may move upwards. This is especially true of consumers who lower levels of self control and hence tend to overtaken by time-inconsistent promotion concerns of consuming that product. It is difficult to predict how L will be impacted in this situation.

4.	Chitturi, Raghunathan and Mahajan (2007)	High prevention (promotion) orientation leads people to naturally trade hedonic (functional) attributes for functional (hedonic) ones. As a consequence, people, high on promotion (prevention) orientation, will experience sadness (guilt) when they trade functional (hedonic) attributes for hedonic (functional) ones.		Regulatory-Fit Account	If a product is seen high on the hedonic (functional) dimensions, then promotion (prevention) oriented people may have U move upwards. It is difficult to predict how U will be impacted. In the reverse case, where a product is seen high on functional (hedonic) dimension, both U should move downwards for both the regulatory foci.
5.	Herzenstein, Posavac and Brakus (2007)	Promotion-focused consumers, versus prevention-focused consumers, are more likely to buy really-new products. This is so, because promotion-focused consumers seem to bear lower levels of uncertainty on the performance of really-new products. Thus, uncertainty in the performance of really-new products mediates the relationship between regulatory focus and purchase intentions. Finally, when performance risk for really-new products was made clearly explicit, then both promotion and prevention-oriented consumers became equally circumspect.	The uncertainty involved in buying a really-new product is diagnostic only to prevention-oriented consumers, but not to promotion-oriented consumers, who tend to make impulsive purchase decisions for new products. This is aligned	Asymmetric-Elaboration Account	When it comes to purchasing of really-new products, U may move upwards move upwards for promotion-oriented consumers, while U may move down for prevention-oriented consumers.

			with our finding that prevention-oriented consumers may be finding the task of specifying the price range more difficult than is found by promotion-oriented consumers.		
6.	Mourali, Bockenholt and Laroche (2007)	Promotion (prevention) oriented consumers are more (less) likely to be sensitive to the presence of a dominant brand in their consideration set, and hence will likely (not) choose the dominant brand, given that promotion-oriented (prevention-oriented) consumers tend to (tend not to) undertake heuristic processing. This effect will be enhanced, if consumers are asked to justify their choice selections.		Findings are not applicable to determining account type support	If the focal product is a dominant brand in a consideration set, then, promotion-oriented consumers, versus prevention-oriented consumers, may have their U moving upwards.
7.	Hamilton and Biehal (2005)	Promotion (prevention) focus can be situationally generated by soliciting consumers by thinking of themselves as independent (interdependent). Consumers under independent (interdependent) self construal are more likely to choose alternatives that maximize potential gains (minimize potential losses). Consumers		Regulatory-Fit Account	The U, for a product that can be viewed as a conservative-default choice or a reliable choice, may move upwards, for consumers who highlight their interdependent self construal, in comparison to a product that is viewed merely as a high-

				with our finding that prevention-oriented consumers may be finding the task of specifying the price range more difficult than is found by promotion-oriented consumers.		
6.	Mourali, Bockenholt and Laroche (2007)	Promotion (prevention) oriented consumers are more (less) likely to be sensitive to the presence of a dominant brand in their consideration set, and hence will likely (not) choose the dominant brand, given that promotion-oriented (prevention-oriented) consumers tend to (tend not to) undertake heuristic processing. This effect will be enhanced, if consumers are asked to justify their choice selections.		Findings are not applicable to determining account type support	If the focal product is a dominant brand in a consideration set, then, promotion-oriented consumers, versus prevention-oriented consumers, may have their U moving upwards.
7.	Hamilton and Biehal (2005)	Promotion (prevention) focus can be situationally generated by soliciting consumers by thinking of themselves as independent (interdependent). Consumers under independent (interdependent) self construal are more likely to choose alternatives that maximize potential gains (minimize potential losses). Consumers		Regulatory-Fit Account	The U, for a product that can be viewed as a conservative-default choice or a reliable choice, may move upwards, for consumers who highlight their interdependent self construal, in comparison to a product that is viewed merely as a high-

				with our finding that prevention-oriented consumers may be finding the task of specifying the price range more difficult than is found by promotion-oriented consumers.		
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7.	Hamilton and Biehal (2005)	Promotion (prevention) focus can be situationally generated by soliciting consumers by thinking of themselves as independent (interdependent). Consumers under independent (interdependent) self construal are more likely to choose alternatives that maximize potential gains (minimize potential losses). Consumers		Regulatory-Fit Account	The U, for a product that can be viewed as a conservative-default choice or a reliable choice, may move upwards, for consumers who highlight their interdependent self construal, in comparison to a product that is viewed merely as a high-

		with interdependent self-construal, much like prevention-oriented consumers, focus on avoiding losses and hence choose the least risky alternative. Consumers with an interdependent self construal should prefer status quo more so than independents. Finally, the regulatory-focus of the consumer mediates the relationship between self construal and preference for status quo, if the status quo is a conservative option.			performance product. The U, for a product that can be viewed as high performance product, may move upwards, for consumers who highlight their independent self construal, in comparison to a product that is merely viewed as reliable.
8.	Zhu and Meyers-Levy (2007)	The authors attempt to explain the cognitive process differences between promotion and prevention focus. They argue that promotion-oriented people undertake relational elaboration which involves integrating and abstracting shared aspects across dissimilar aspects of information. In contrast, prevention-oriented people undertake item-specific elaboration, which involves engendering context-specific and clear-cut associations to individual items in isolation of others.	Study shows that promotion and prevention-oriented consumers elaborate on different aspects. Hence, this hints at support for regulatory-fit account. However, paper does not specify whether these distinct styles of elaboration are consciously or automatically	Findings are not applicable to determining account-type support	Not Apparent

			undertaken. Hence, specific account support cannot be determined.		
9.	Grant and Xie (2007)	When undertaking a risk-reduction strategy by hedging, promotion-oriented people tend to focus on that half that was sold (the change component), versus prevention-oriented people, who tend to focus on that half that was retained (the default component). The authors call this differential focus, the locus of attention. Also, prevention-oriented participants (versus, promotion-oriented participants) were more likely to hold the stock when the stock was expected to rise, while promotion-oriented participants were more likely sell the stock when the stock was expected to fall.	Given that both promotion and prevention-oriented consumers seem to consciously focus on different information in order to accomplish a task, this paper is presumed to support the regulatory-fit account.	Closer to Regulatory-Fit Account	Not Apparent
10.	Louro, Pieters & Zeelenberg (2005)	Despite their higher levels of satisfaction with their current supplier, consumers who have a high sense of prevention-oriented-regulatory pride, in contrast to high-promotion-pride consumers, tend to not purchase from that same supplier. Such tendencies are not observed in consumers		Asymmetric-Elaboration Account	Not Apparent

		with low levels of regulatory pride.			
11.	Briley and Wyer (2002)	Making people aware of their cultural and national origins instills prevention motive into people, and instantaneously makes them risk loathing. One of the consequences of this is that such people tend to choose products that have compromise overall attributes rather than products that both have extremely desirable and undesirable attributes.	Paper focuses mainly on the induction of prevention-orientation but not on promotion-orientation.	Findings are not applicable to determining account-type support	The U for a compromise product, may move upwards, for consumers whose cultural origins have been highlighted.
12.	Lee, Keller and Sternthal (2008)	Consumers construe information at a level that is compatible with their regulatory focus. Thus, promotion (prevention) oriented consumers will focus on high-level construal, that is, abstract information (low-level construal, that is, attributes specific) information to be more compatible with their orientations. Further, information construal that matches consumers' regulatory focus will be evaluated to be superior.	In case of a match (mismatch) between consumers' regulatory focus and product construal level, consumers experience a regulatory fit (misfit).	Closer to Regulatory-fit	The U for consumers in a match (mismatch) condition may tend to move upwards (downwards).
13.	Shine, Park and Wyer (2007)	Promotion-oriented consumers, versus prevention-oriented consumers, are more susceptible to the set-completion hypothesis, rather than to the attribute-accessibility hypothesis. This hypothesis suggests that when a firm promotes two complementary products (e.g. a digital camera and a photo printer) together, then that will lead to improved evaluations for		Findings are not applicable to determining account-type support	Under such conditions which highlight synergy as laid out by Shine et al., the U for promotion-oriented consumers may tend to move upwards. This finding will not hold for prevention-oriented consumers.

		both products, for promotion-oriented consumers. This will not occur, if the firm promotes two products within the same product category (e.g. two models of photo printers), or to two unrelated product categories (e.g. a photo printer and a snowboard). Essentially, promotion-oriented consumers find the synergy of owning a set of compatible extensions, from the same manufacturer, to be a important information, while prevention-oriented consumers do not.			
14.	Dholakia, Gopinath, Bagozzi and Nataraajan (2006)	Promotion-oriented consumers, versus prevention-oriented consumers, are more susceptible to temptation. However, the eagerness of promotion-oriented consumers to reach their positive goals also enables them to successfully resist such desires. The authors argue that promotion-oriented consumers come up with more approach strategies of desire-resistance (which mediates this effect) as compared to the number of such approach strategies that prevention-oriented consumers come up with. Hence promotion-oriented consumers are in a better situation to withhold from temptations.		Findings are not applicable to determining account-type support	Given that motivated promotion-oriented consumers are better at resisting temptation, promotion-oriented consumers may have a lower U for a desirable product than will prevention-oriented consumers, if the situation demands that consumers resist temptation of purchasing that product.
15.	Yeo and Park (2006)	Prevention-oriented consumers are more likely to have more favorable evaluation for brand extensions that are similar to the parent brand and less likely to have favorable evaluation for brand extensions		Closer to Asymmetric-Elaboration Account	Under conditions of brand extension that is similar to parent brand, the U for prevention-oriented consumers may tend to move upwards. This effect will

		that are dissimilar to the parent brand. This effect will not occur with promotion-oriented consumers, and the level of similarity may not influence the evaluation of brand extensions in the case of promotion-oriented consumers. This is so because promotion-oriented consumer tend to grant a relatively higher weight to their hedonic association with parent brand, while prevention-oriented consumers tend to grant a relatively higher weight to the risks associated in the brand extensions.			not hold for promotion-oriented consumers given that they do not find brand extension similar to that of parent brand to be a diagnostic information.
16.	Monga and Zhu (2005)	When confronted with a transaction situation, buyers (sellers) are more likely to be inherently prevention (promotion) focused. Hence, buyers (sellers) will tend to have the loss side (gain side) of the prospect theory utility curve as their zone of reference, and hence will become susceptible to their relevant frames of reference. Thereby, under conditions of high involvement, for positive outcomes, buyers (sellers) will experience more positive affect in response to a non-loss (gain) than in response to a gain (non-gain). Further, under conditions of high involvement, buyers (sellers) will experience more-negative affect in response to a gain (non-gain) than in response to a response to a non-loss (loss). These findings will not hold under conditions of low levels of motivation.	Framing messages in the form of gain/non-gain/loss/non-loss scenario will influence importance bestowed on information and thereby influence U and L of buyers and sellers differently.	Regulatory-Fit Account	Sellers may have a higher expectation of buyer's U in comparison to the actual U of buyers. Also, given buyers are more susceptible to loss frames, buyer's U may drastically fall downwards, if they are presented the scenario in a loss frame. Level of involvement will further moderate this effect.
17.	Wang and	Consumers actively create regulatory fit by		Regulatory-	Under low levels of motivation,

	Lee (2004)	preferentially seeking out and elaborating specifically on information that creates a regulatory fit condition, over information that creates a regulatory misfit. As such, this finding suggests support for the constructive preference view. However, the authors identify an important boundary condition. They find this effect to be supported only when participants were in a low-motivation condition, but not when participants were in a high-motivation condition. When consumers are (are not) motivated to elaborate deeply on all available information, then they will not (will) tend to rely solely on the affect generated by experiencing the regulatory-fit, in attitude formation. Further, regulatory fit effect on brand attitudes is mediated by perceived attractiveness ratings of promotion and prevention features.		Fit Account	promotion-and-prevention oriented consumers experiencing regulatory fit, will tend to have a higher U than will promotion-and-prevention oriented consumers under high level of motivation. Alternatively, under low levels of motivation, promotion-and-prevention oriented consumers will focus only on that part of information available in the environment that helps them achieve regulatory fit. Such consumers (both promotion and prevention oriented) should specify a higher U.
18.	Chernev (2004 B)	In extending the regulatory-fit concept to compatibility between regulatory orientation and product-attribute type, Chernev suggests that promotion (prevention)-oriented consumers are more likely to overweigh hedonic, performance and attractiveness (utilitarian, reliability) attributes of the products, and thereby achieve a regulatory goals, in shopping for that product.		Regulatory -fit Account	For Promotion and prevention oriented consumers, who are presented a goal-compatible product, the U may tend to move upwards. Under the condition of goal-attribute incompatibility, U may move downwards.
19.	Lee and Aaker (2004)	Promotion (prevention)-oriented consumers are more likely to be positively influenced and persuaded by a message, when the		Regulatory -fit Account	Under regulatory fit conditions, as caused by the suggested compatibility, U may tend to

		message is presented in the gain (loss) frame. The authors propose that enhanced ease of processing the message (that is, processing fluency) created by this proposed compatible combination, leads to the consumers' experiencing regulatory fit, and thereby causes enhanced persuasion. Alternatively, when people feel that they are vulnerable to a particular unfavorable outcome (due for a positive outcome), they are more likely to focus on the negative (positive) aspects of a situation. Loss-framed (gain-framed) messages highlight the benefits lost (benefits to be gained) and hence are more persuasive.			move upwards for both promotion- and-prevention oriented consumers. Conversely, under conditions of regulatory misfit U may move downwards, across both the regulatory foci.
20.	Pham and Avnet (2004)	Promotion (Prevention)-oriented consumers are more likely to rely on their subjective affect towards (the substance of) the message in their evaluation judgments. Also, promotion (prevention)-oriented consumers will find affective response to (substance of) the message to be more diagnostic in evaluating the brand that the message is promoting. Further, while promotion-oriented consumers will find the affective association with the stimulus to be even more diagnostic when the stimulus is more attractive, prevention-oriented consumers will find the substantive claims of the stimulus to more diagnostic when the stimulus' claims are weak. Importantly, other individual differences, such as level of motivation, mood etc., do not seem to moderate these findings.		Asymmetric-Elaboration Account	Advertisements highlighting substantive features of the product may cause U to move upwards for prevention-oriented consumers. This effect will not a hold for promotion-oriented consumers. Conversely, advertisements highlighting affective associations with the product may cause U to move upwards for promotion-oriented consumers. This effect will not a hold for prevention-oriented consumers.

21.	Lee, Aaker and Gardner (2000)	Consumers with an independent (interdependent) self-construal are likely to harbor a promotion (prevention) orientation. As such, consumers with independent (interdependent) self-construal find promotion-focused (prevention-focused) information to be more diagnostic. Thus, consumers with independent (interdependent) self construal weighed gain-framed (loss-framed) information more heavily than loss-framed (gain-framed) information.		Regulatory-Fit Account	For both the regulatory foci, under conditions of self-construal and framing match, U may tend to move upwards. Conversely, under conditions of self-construal and framing mismatch, U may tend to move downwards.
22.	Aaker and Lee (2001)	When persuasive appeals have a match (mismatch) between the self-regulatory goal primed and persuasive appeal as suggested here, consumers are more (less) likely to recall contents of the message, and more (less) likely to be more scrutinizing towards the strengths of the arguments in an matching appeal. Finally, in a match (mismatch) condition, consumers will have more favorable (less favorable) attitudes towards the stimulus brand when the matching arguments are strong. The reverse will be the case in this condition, if the matching argument are weak.		Regulatory-Fit Account	For both the regulatory foci, under conditions of self-construal and ad persuasive appeal match, U may tend to move upwards, due to increased message-content recall. Conversely, under conditions of self-construal and ad persuasive appeal mismatch, U may tend to move downwards, due to reduced message-content recall etc.
23.	Higgins et al. (2003)	Consumers experience regulatory fit if they pursue a goal in a manner that helps them uphold (that is, reinforce) their regulatory goals e.g. eagerly if they are promotion-oriented, and vigilantly if they are prevention focused. Essentially, regulatory fit is about enabling consumers to achieve their natural preference		Regulatory-Fit Account	When consumers experience regulatory fit then, the U may tend to move upwards, in comparison to when consumers experience a regulatory misfit. In the misfit condition, U may tend to move downwards.

		in information processing. In regulatory-fit situation, consumers tend to have stronger evaluative reactions. Hence, both, promotion and prevention-oriented consumers, exhibit a higher willingness-to-pay (a transfer of value from the regulatory-fit experience to the stimulus is said to have taken place) for an object that has been evaluated in a manner so that they achieve a regulatory-fit, versus in a manner in which they achieve a regulatory-misfit.			
24.	Molinger, Aaker and Penningt on (2008)	When a purchase is due very soon (off in future), consumers get concerned about ensuring that their prevention-related obligations are met (promotion-related fervor is achieved), thereby causing heightened sensitivity to pain anticipated from potentially not achieving the minimal goal (heightened sensitivity to pleasure in potentially achieving a maximal goal) of buying a gift for a loved one. In this condition, consumers will find prevention-framed (promotion-framed) products to be more diagnostic.		Regulatory -Fit Account	When a purchase is imminent (off in future), U for that purchase may move upwards, if that product is presented in a prevention-frame (promotion-frame). When a purchase is imminent (off in future), the U for that purchase may move downwards, if that product is presented in a promotion-frame (prevention-frame).
25.	Avnet and Higgins (2006)	Experiencing regulatory fit increases consumers' confidence in their evaluative judgments, the importance of their reactions, and their engagement in their reactions (whether positive or negative). The authors argue that regulatory fit is independent of other influences such as hedonic outcome, mood and the level of arousal.		Regulatory -Fit Account	When consumers experience regulatory fit then, U may tend to move upwards. When consumers experience a regulatory misfit U will move downwards.

		arousal.			
26.	Chernev (2004 A)	Prevention (promotion)-oriented consumers are more likely to weigh the default option more (less) heavily. Hence, prevention-oriented people are more likely to overweigh the negative consequences of any potential departure from the status quo, then are promotion-oriented people. Thereby, prevention-oriented consumers are more likely to opt for the default option, and promotion-oriented consumers are more likely to take up the non-default option. Further, prevention (promotion)-oriented consumers are likely to feel more (less) regret for past-and-current choices that deviate from the norm or default option.		Findings are not applicable to determining account-type support	Prevention-oriented consumers should have a higher U for a product that can be perceived as a default option or as retaining status quo, as compared to a product that is perceived as a deviant option. This will not be the case for promotion-oriented consumers. For example, if a bunch of consumers have been loyal to a brand of soap, which suddenly is in short supply, then prevention-oriented people among them may be willing to specify a higher U to acquire that brand of soap, than will their promotion-oriented counterparts.
27.	Chen, Ng and Rao (2005)	Westerners (Easterners) who are promotion (prevention) focused will be more impatient when they are presented a message that emphasizes an opportunity fulfilling a promotion (prevention) goal, versus a message that emphasizes an opportunity fulfilling a prevention (promotion) goal. Further, given that people exert more cognitive resources in interpreting a message that emphasizes negative information, that authors argue that Westerners (Easterners), presented a message that emphasizes a promotion loss (prevention loss) rather than a promotion gain (prevention gain) will experience		Regulatory-Fit Account	Westerners (Easterners) will have a higher U, when they are presented a message that emphasizes an opportunity fulfilling a promotion (prevention) goal, versus a message that emphasizes an opportunity fulfilling a prevention (promotion) goal. Further, Westerners (Easterners), will have a higher U, if they are presented a message emphasizing avoiding a promotion loss (prevention loss) rather than achieving a promotion gain (prevention gain).

		higher level of impatience than caused by a message that emphasizes a prevention loss (promotion loss) rather than a prevention gain (promotion gain).			
28.	Jain, Agrawal and Maheswaran (2006)	Jain, Agrawal and Maheswaran (2006) argue that a maximal claim like "brand A is superior to brand B") signifies a move from the status quo and thereby conveys uncertainty to prevention-oriented consumers (hence is not persuasive to prevention-oriented consumers), while conveying inspiration for eager strategies to promotion-oriented consumers (hence is more persuasive to promotion-oriented consumers). A minimal message ("Brand A is equivalent or similar to brand B"), on the other hand, is persuasive for prevention-oriented people, while not appealing promotion-oriented people.		Findings are not applicable to determining account-type support	Promotion (prevention)-oriented consumers may have a higher U, when presented with a maximal (minimal) message. In the converse situation, U may move downwards.
29.	Jain, Lindsey, Agrawal and Maheswaran (2007)	Given that prevention (promotion)-oriented consumers show a higher (lower) preference for consistency, prevention (promotion)-oriented consumers' inter-brand ratings, that is, rating for the focal brand and the comparison-reference brand, will be negatively correlated (uncorrelated). Further, prevention (promotion)-oriented consumers tend to evaluate the reference/comparison (focal) brand first and also tend to recall more details regarding the reference (focal) brand. As such, prevention-oriented consumers use the comparison brand		Asymmetric-Elaboration Account	If the situation is manipulated to have a relatively lower (higher) price and features for the reference brand, then the prevention-oriented consumers may have a lower (higher) U. In contrast, this effect will not hold for promotion-oriented consumers, who will tend to specify the L and U for the focal brand, based on their internal knowledge structures and on their affective associations with

		As some sort of point of reference, a tendency not seen in promotion-oriented consumers.			the focal brand.
30.	Avnet and Higgins (2003)	The transfer from regulatory fit to increased monetary value can even be seen even when the regulatory fit is in the domain of locomotion and assessment orientation. Hence, participants experiencing fit when a book-light was chosen with a strategy that fit their regulatory focus (for example, assessment matched with full-evaluation & location matched with progressive elimination) were ready to pay more than 40% more than participants who experienced a regulatory misfit.		Regulatory-Fit Acount	Consumers experiencing a regulatory fit in the domain of locomotion and assessment (that is, assessment matched with full-evaluation & location matched with progressive elimination) may have a higher relatively U. In the converse condition, U may move lower.

In the next section, we focus on deriving random-parameter models with additional predictors of the range of acceptable prices, beyond consensus information and regulatory focus.

CHAPTER 7

ADDITIONAL PREDICTORS OF ACCEPTABLE PRICE RANGE

So far, we have focused mainly on how the interaction between regulatory focus and consensus information condition impacts the upper and lower limits of the acceptable price range. However, this research also focuses on how predictors, such as decision ease and others, yet to be identified, influence price range beyond the influence of the specific 2 regulatory foci and 4 information conditions. To accomplish that, we will first execute a set of regression analyses with perceived diagnosticity of the information condition as the random factor. We will execute separate regression analyses with information diagnosticity as the random factor, for the two regulatory foci. The underlying assumption will be that the heterogeneity in the means of the model parameters is based on the diagnosticity of the information available. With that, we will be able to generalize the results of our analyses from the 4 distinct information conditions, to a population of information conditions. Doing that will enable us to draw broad behavioral implications in price acceptance, separately for promotion-oriented consumers and for prevention-oriented consumers.

However, we also desire to further generalize the findings of our study. Because, our study will be a 2 (regulatory focus) X 4 (information conditions) design, we have 8 cells and thereby 8 levels of interaction between regulatory focus and information conditions. We can thus execute another set of regression analyses with the interaction, between regulatory focus and information, as a random factor. The underlying assumption will be that the heterogeneity in the means of the model parameters is based on the interaction between diagnosticity of the information and regulatory focus. With that, we will be able to generalize the results of our analyses from the 8 distinct interactions between,

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regulatory focus and information condition, to a whole population of such interactions. Executing such a regression analysis over the entire sample (which includes both promotion and prevention-oriented participants), will enable us to draw broad and general behavioral implications in price acceptance, for the consumer in general (irrespective of her regulatory focus, and irrespective of which information condition she has been exposed to).

Hence, in this section we will focus on identifying other relevant predictors of willingness-to-pay, which will then be used in the random-parameter regressions. Pricing and service-quality literature presents much evidence that increased purchase commitment influences consumer's willingness to pay for the product (see Monroe 2003 for a concise review). Further, as discussed earlier, we expect the level of difficulty experienced by the consumer to be a predictor of the acceptable price range.

Additionally, recent research in regulatory focus shows that promotion (prevention)-oriented consumers tend to naturally construe an object at a relatively high-level or abstract-global (low-level or concrete-local) level (Keller, Lee and Sternthal). Forster and Higgins (2005) suggest that global (local) processing should be facilitated for people in a promotion (prevention) focus. Hence, promotion-oriented consumers tend to view the product as an overall entity and may evaluate it on its overall usability and benefits. In contrast, prevention-oriented consumers tend to perceive a product as a bundle of features, and may evaluate the product based on the fancy individual-product features.

Recent research has shown that differences in the level of construal can lead to significant differences in people's probability estimates (Wakslak and Trope 2008). A general finding in the Construal-level theory (Trope and Liberman 2003) is that when a

event is temporally distant, people tend to define their goals in a relatively abstract manner, but as the event nears, people tend to get more specific in their goals. In congruence with this, Lee and Ariely (2006), find that in a shopping context, consumers do think of their goals in rather abstract terms early in their shopping trip, but get more specific in their shopping goals later during their shopping trip. On similar lines, Liberman, Trope and Wakslak (2007) argue that consumers may have a wider range of acceptable prices if they take a distal perspective, while maintaining a narrower price range if they take an immediate perspective.

Extending such finding from a temporal perspective, as outlined in the Construal Level theory, to product construal level, we conjecture that this difference between the two regulatory foci in the context of their levels of product construal may be another predictor of the differences in their willingness-to-pay. Given this, we argue that the inherent differences in the level of product construal, across the regulatory foci, may affect the acceptable price range for a product. Prior literature does not, however, provide clear-cut guidance for making specific predictions on whether any of these distinct construals influence the upper or lower limit of the acceptable price range. Hence, we refrain from making any predictions and will rather rely on the results of our study to confirm these speculations.

Given this discussion, we specify the following level-1 model as the predictors of acceptable price range:

Price_range $= B_0 + B_1.\text{purchase\_commitment} + B_2.\text{decision\_ease} + B_3.\text{low\_level\_construal} + B_4.\text{high\_level\_construal} + B_5.\text{Regulatory\_Focus\_Level} + e_0$

_____(1)

where e_0 is a normally-distributed random error.

The model (1) has individual-specific predictors (namely, purchase_commitment, decision_ease, low_level_construal, high_level_construal and regulatory_focus_level), of the acceptable price range. The study that we will be running has 4 distinct consensus-information conditions. Each participant will be placed in one of the 4 information-conditions. Hence, we also introduce the diagnosticity of consensus information, under each of the 4 information conditions, as the level-2 predictor of the acceptable price range.

The aim of this study is to generalize the influence of availability of different combinations of consensus-information beyond the 4 specific conditions that we will be manipulated in the study. Essentially, we want to generalize the influence of consensus-information on price range, beyond just the 4 in this setup, to a population of consensus-information conditions. Hence, we will be specifying the perceived diagnosticity of the consensus-information, in the 4 information conditions, as a predictor of the heterogeneity of the means of the coefficients of the predictors in model (1). In this random-parameters model (Greene 2007, p.233), the heterogeneity in the mean values of each of the 6 coefficients (B_0 through B_5) is predicted by the diagnosticity perceived in the consensus information provided in the 4 information conditions.

The random-parameters linear model for price range is specified as follows:

Price_range = B_{00} + B_{01}.purchase_commitment + B_{02}.decision_ease + B_{03}.low_level_construal + B_{04}.high_level_construal + B_5.Regulatory_Focus_Level + e_0

such that,

$B_{00} = \gamma_{000} + \gamma_{001}$ consensus_diagnosticity $+ r_{00}$

$B_{01} = \gamma_{010} + \gamma_{011}$ consensus_diagnosticity $+ r_{01}$

$B_{02} = \gamma_{020} + \gamma_{021}$ consensus_diagnosticity $+ r_{02}$

$B_{03} = \gamma_{030} + \gamma_{031}$ consensus_diagnosticity $+ r_{03}$

$B_{04} = \gamma_{040} + \gamma_{041}$ consensus_diagnosticity $+ r_{04}$

$B_{05} = \gamma_{050} + \gamma_{051}$ consensus_diagnosticity $+ r_{05}$

where,

consensus_diagnosticity is the perceived diagnosticity of the consensus information,

perceived by the individual given the cell that the individual is placed in. The

diagnosticity that the individual perceives is dependent on which of the 4 consensus

information-availability conditions is the individual is placed in.

Further, error terms r_{00} through r_{05} are assumed to be normally distributed. We will refer

to this model as model A.

In this study, participants will be specifying the highest and the lowest prices they are

willing to pay for a product. The acceptable price range will be calculated by subtracting

the participants lowest offer price from their highest offer price. As such, an important

development in acceptable-price-range literature will be to understand how the lower

limit of acceptable-price range influences the upper-limit of the acceptable price range,

and vice versa. Given lack of much research in the acceptable price range domain, prior

literature does not provide us guidance on what to expect in terms of how the upper and

lower limits of the acceptable price range influence each other. This study attempts to

take the first step towards that end.

Hence, we modify model A and now specify model B, with the upper limit of the acceptable price range as the dependent variable:

$Upper\_Limit = B_{10} + B_{11}.purchase\_commitment + B_{12}.decision\_ease +$

$B_{13}.low\_level\_construal + B_{14}.high\_level\_construal + B_{15}.Lower\_Limit +$

$B_{16}.Regulatory\_Focus\_Level + e_1$

such that,

$B_{10} = \gamma_{100} + \gamma_{101} \ consensus\_diagnosticity + r_{10}$

$B_{11} = \gamma_{110} + \gamma_{111} \ consensus\_diagnosticity + r_{11}$

$B_{12} = \gamma_{120} + \gamma_{121} \ consensus\_diagnosticity + r_{12}$

$B_{13} = \gamma_{130} + \gamma_{131} \ consensus\_diagnosticity + r_{13}$

$B_{14} = \gamma_{140} + \gamma_{141} \ consensus\_diagnosticity + r_{14}$

$B_{15} = \gamma_{150} + \gamma_{151} \ consensus\_diagnosticity + r_{15}$

$B_{16} = \gamma_{160} + \gamma_{161} \ consensus\_diagnosticity + r_{16}$

where, upper_limit and lower_limit are the upper and lower limits of the acceptable price range respectively

and, e_1, and r_{10} through r_{15} are normally distributed error terms.

Further, we modify model A and specify model C, with the lower limit of the acceptable price range as the dependent variable:

Lower_Limit = B_{20} + B_{21}.purchase_commitment + B_{22}.decision_ease +

B_{23}.low_level_construal + B_{24}.high_level_construal + B_{25}.Upper_Limit +

B_{26}.Regulatory_Focus_Level + e_2

such that,

$B_{20} = \gamma_{200} + \gamma_{201}$ consensus_diagnosticity + r_{20}

$B_{21} = \gamma_{210} + \gamma_{211}$ consensus_diagnosticity + r_{21}

$B_{22} = \gamma_{220} + \gamma_{221}$ consensus_diagnosticity + r_{22}

$B_{23} = \gamma_{230} + \gamma_{231}$ consensus_diagnosticity + r_{23}

$B_{24} = \gamma_{240} + \gamma_{241}$ consensus_diagnosticity + r_{24}

$B_{25} = \gamma_{250} + \gamma_{251}$ consensus_diagnosticity + r_{25}

$B_{26} = \gamma_{260} + \gamma_{261}$ consensus_diagnosticity + r_{26}

where, the error terms e_2, and r_{20} through r_{26} are normally distributed.

Further, we assume that both, the upper-and-lower limits of the acceptable price range,

are censored in both directions. The reason for this is that a consumer buying a product

in a retail store or online, will have many more substitutes to the chosen laboratory

stimulus (Lucking-Reiley et al. 2000; Harrison, Harstad, Rutström 2004). Additionally, in

reality, consumers shopping online or at a retail store will have much more knowledge

on the target product and competitors than can be provided to participants in an

experimental setup. Finally, researchers can never really be aware of all variables that

can influence their acceptable price range. For example, some consumers may check

product recommendations from Consumer Reports, in finalizing   their price-

acceptance decision-making. Given this, we argue that lack of the presence of these

other influences (given that they cannot be replicated in an experimental or a survey

setup), induces the range of upper and lower limits of the acceptable price range to be censored in both directions.

Given that the upper and lower limits of the acceptable price range are censored, we will be executing a random-parameters double-limit tobit regression for models B and C. As with model A, we will identify models B and C separately for the two regulatory foci and study the differences in the significance of predictors on the upper-and-lower limits of the acceptable price range. Given that models A, B and C are specified to be random over the diagnosticty of the information condition, the findings of these models are general (and pertinent beyond the 4 conditions in the experimental setup).

It is important to note the results of models A, B and C will be used to understand the differences in price-acceptance behavior in promotion-oriented consumers versus in prevention-oriented consumers. Hence, we will identify the models A, B and C separately for the two regulatory foci. As such, we will first identify the models A, B and C for the sample of promotion-oriented participants (with consensus-information conditions as random). Then, we will identify models A, B and C for the sample of prevention-oriented participants (with consensus-information conditions as random). We will then compare the differences in significance of predictors across the two regulatory foci.

However, in addition to studying price acceptance behavior of a promotion or of a prevention-oriented consumer, we also intend to understand a generic consumer's price acceptance behavior (beyond specific levels of her regulatory focus). To enable us to understand a generic consumer's price acceptance behavior, we will now specify model D, which is a modification of model A.

Because, our study has a 2 (regulatory focus) X 4 (information conditions) design, we

have 8 cells and thereby 8 levels of interactions between regulatory focus and

information conditions. Model D will be devised to generalize the influence of the

interaction between regulatory focus and information conditions from the 8 in this study,

to an entire population of interactions between regulatory focus and information

conditions. Hence, rather than having level of regulatory focus as one of the predictors,

model D will have the 2-way interaction between regulatory focus and information

condition, as random factor. Hence, model D will be identified over the entire sample.

Hence, Model D is specified as follows:

Price_range = B_{30} + B_{31}.purchase_commitment + B_{32}.decision_ease +

B_{33}.low_level_construal + B_{34}.high_level_construal + e_3

such that,

B_{30} = γ_{300} + γ_{301} (regulatory_focus*consensus_diagnosticity) + r_{30}

B_{31} = γ_{310} + γ_{311} (regulatory_focus*consensus_diagnosticity) + r_{31}

B_{32} = γ_{320} + γ_{321} (regulatory_focus*consensus_diagnosticity) + r_{32}

B_{33} = γ_{330} + γ_{331} (regulatory_focus*consensus_diagnosticity) + r_{33}

B_{34} = γ_{340} + γ_{341} (regulatory_focus*consensus_diagnosticity) + r_{34}

where (regulatory_focus * consensus_diagnosticity) is the product of the regulatory

focus level and perceived dignosticity of the consensus information

and, the error terms e_3, and r_{30} through r_{34} are normally distributed.

Similarly, we modify models B and C and present models E and F. Model E is specified as follows:

Upper_Limit = B_{40} + B_{41}.purchase_commitment + B_{42}.decision_ease +

B_{43}.low_level_construal + B_{44}.high_level_construal + B_{45}.Lower_Limit + e_4

such that,

B_{40} = γ_{400} + γ_{401} (regulatory_focus*consensus_diagnosticity) + r_{40}

B_{41} = γ_{410} + γ_{411} (regulatory_focus*consensus_diagnosticity) + r_{41}

B_{42} = γ_{420} + γ_{421} (regulatory_focus*consensus_diagnosticity) + r_{42}

B_{43} = γ_{430} + γ_{431} (regulatory_focus*consensus_diagnosticity) + r_{43}

B_{44} = γ_{440} + γ_{441} (regulatory_focus*consensus_diagnosticity) + r_{44}

B_{45} = γ_{450} + γ_{451} (regulatory_focus*consensus_diagnosticity) + r_{45}

where, e_4, and r_{40} through r_{45} are normally distributed error terms.

We specify model F as follows:

Lower_Limit = B_{50} + B_{51}.purchase_commitment + B_{52}.decision_ease +

B_{53}.low_level_construal + B_{54}.high_level_construal + B_{55}.Upper_Limit + e_5

such that,

B_{50} = γ_{500} + γ_{501} (regulatory_focus*consensus_diagnosticity) + r_{50}

B_{51} = γ_{510} + γ_{511} (regulatory_focus*consensus_diagnosticity) + r_{51}

B_{52} = γ_{520} + γ_{521} (regulatory_focus*consensus_diagnosticity) + r_{52}

B_{53} = γ_{530} + γ_{531} (regulatory_focus*consensus_diagnosticity) + r_{53}

B_{54} = γ_{540} + γ_{541} (regulatory_focus*consensus_diagnosticity) + r_{54}

B_{55} = γ_{550} + γ_{551} (regulatory_focus*consensus_diagnosticity) + r_{55}

where, the error terms e_2, and r_{20} through r_{26} are normally distributed.

As with model D, models E and F too will be identified over the entire sample. In the next

section, we present the details of the procedure and measures in our Study.

CHAPTER 8

STUDY 1

8.1 Participants and Stimulus

Study 1 was undertaken to establish support for H1 over $H1_{alternate}$ or vice versa. A total of 175 undergraduate students from a major university in the south participated in the study. Given that the purpose of this study was to understand the predictors of the range of acceptable prices, we wanted to use a stimulus whose price was high enough so as to stimulate a reasonable acceptable price range, but not too high so as to induce an income effect. Additionally, we wanted to ensure that the stimulus was a product of interest, and was regularly being used by participants. A laptop computer fit this bill perfectly and most all undergraduate students actually owned their personal laptops. Given that the laptop has been used by Louro, Pieters and Zeelanberg (2005) earlier in regulatory-focus research, we finalized on the laptop as our stimulus.

8.2 Procedure

The study was conducted using Qualtrics software, which had the stimulus, options and other details preprogrammed in advance. Participants worked with the software in an interactive manner, such that the software presented the participants with information about the stimulus and other details such as available product information. After that participants responded to several items that were dependent measures, demographics questions etc. At the end of this exercise, participants were granted extra course credit, and were debriefed. The authors worked with participants in groups that ranged from 2 to 14 people in size.

Participants were randomly assigned to either a primed-ideals (promotion) or a primed-oughts (prevention) condition. Based on Pham and Avnet (2004), in the primed-ideals (oughts) condition, participants were asked to think about their past and current hopes, aspirations, and dreams (duties, obligations and responsibilities), and to list at least 3 of each. After participants completed this task, they were then told to view two laptop computers, as a part of a purportedly different study.

Participants were asked to review two HP notebook laptops. The first one was a target laptop for which participants were eventually going to specify their acceptable price range, while the second was a reference laptop whose price was to serve as the single-point reference price for the target laptop. Participants were told that they were to imagine that they will be making potential purchase decisions and hence spend enough time viewing the details of the two laptops. Participants were displayed pictures and 7 features of the target laptop along with pictures and the same 7 features of the reference laptop. Participants were in a position to compare pictures and features of these two laptops, and spend as much time as required in understanding the details of the two laptops.

Given that this study was intended to study effects of regulatory focus on choice, it was important to ensure that two laptop were neither perceived as too utilitarian (promotion concerns) nor viewed as too hedonic (prevention concerns). Brief discussions were undertaken with 8 middle-aged participants to assess this concern. Five of these participants felt that the target laptop was slightly higher on the hedonic dimension than was the reference laptop, while being comparable on the utilitarian dimension. The remaining three participants felt that the two laptops were balanced on both, hedonic

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and utilitarian dimensions. Importantly, none of these 8 participants felt that both the laptops were neither too high nor too low on the utilitarian or on the hedonic dimension.

To avoid overloading the participants with feature information (Malhotra 1982), we displayed only 7 features of both these laptop. We limited ourselves to displaying only those features of the laptops that are understood by most all student population (such as processing speed, memory size, hard drive size, modem type, screen size, screen-resolution, and dual-layer multimedia CD/DVD drive). Further, we wanted to ensure that the target laptop and the reference laptop were fairly comparable, but not exactly the same. We thus had to ensure that the individual features were slightly different, even though overall, both these laptop were quite similar in their capabilities. As an example, we ensured that while the target laptop had a slightly faster microprocessor than the reference laptop, the reference laptop had slightly more hard drive space and slightly larger screen size than the target laptop. All the 8 pretest participants felt that the two laptops were generally comparable, in terms of their features and capabilities.

Further, given that most laptop computers have now become commoditized, it is reasonable to assume that all 7 of the features of the laptop, may be viewed as generally utilitarian, especially given that the price level that the laptops are being presented at suggests almost entry level models. Additionally, prices of laptops have plummeted, even since this study was undertaken, just a few months ago. Moreover, the focus of this study was not to understand how consumers' range of acceptable prices changes as the product-features change across product. Rather, it was to understand how consumers' range of acceptable prices changes, as extrinsic substantive information about the product changes, for the same product.

Participants were told to imagine that they were planning to buy the target laptop on amazon.com, their favorite online store for purchasing electronics products. Unfortunately, the target laptop is not available at amazon.com. Participants were told that the target laptop was available for sale, on an Ebay-like website, with free shipping. Participants were then told that the key decision to be made was specifying an appropriate price to offer for the target laptop. The participants were further informed that incidentally the reference laptop was available for sale on amazon.com for $694.99, with free shipping.

Popular online webstores such amazon.com provide consumers access to product reviews that prior consumers have presented. We have observed that these customer reviews focus mainly on whether the target product met their needs. Most often, these reviews compare the target product with competing products across different or within the same umbrella brand. Amazon.com also provides information on the proportion of consumers who buy a particular product after viewing it and on the proportion of consumers who bought competing products after viewing the target product. Hence, in order to remain close to what is implemented on amazon.com, we presented our participants with extrinsic information on the product, depending on information condition that they were allocated to. In the favorable-only information condition, participants were informed and asked to elaborate on, "Your study of customer reviews on the HP artist on amazon.com suggested that 4 out of 5 customers find that the HP Artist (the target laptop) may be better suited to customer needs than is the HP Pavilion (the reference laptop) and as such is overwhelmingly chosen by customers". In this study, HP Pavilion (the reference laptop) serves to provide a reference price for the HP Artist (the target laptop). The HP Pavilion also provides a context for the competing product, in the 3 conditions where extrinsic information on the product is present.

In the unfavorable-only product-information conditions, participants were informed, "Your study of customer reviews on the HP artist on amazon.com suggested that 4 out of 5 customers find that the HP Pavilion (the reference laptop) may be better suited to customer needs than is the HP Artist (the target laptop) and as such is overwhelmingly chosen by customers" It is important to note that the level of favorableness and unfavorableness of the extrinsic information on the product were maintained at the same level across these two conditions.

In the condition where participants were presented both, favorable and unfavorable extrinsic information on the product, participants were informed, "Your study of customer reviews on the HP artist on amazon.com suggested that 4 out of 5 customers find that the HP Artist (the target laptop) may be better suited to customer needs than is the HP Pavilion (the reference laptop) and as such is overwhelmingly chosen by customers at amazon.com. However, your study of customer reviews on the HP artist on bestbuy.com suggested that 4 out of 5 customers find that the HP Pavilion (the reference laptop) may be better suited to customer needs than is the HP Artist (the target laptop) and as such is overwhelmingly chosen by customers at bestbuy.com."

Finally, participants in the "absence of extrinsic information on the product" condition were not provided any information. Participants in this condition were simply informed that market-intelligence information is not available to them. This condition was to serve as the control condition.

Participants then responded to a series of dependent variable items, and demographic questions. After that, they were debriefed and granted course credit for participation.

8.3 Measures Details

Regulatory-Focus Manipulation Check Measure

To check for the manipulation effect of the regulatory-focus manipulation, participants were asked to respond to two items from Pham and Avnet's (2004) manipulation check items. They are, "If I had to choose right now, I would prefer to do" on a 1 (what others expect of me) through 7 (what I want to do) scale, "If I had to choose right now, I would rather" on a 1 (go wherever my heart takes me) to 7 (do whatever it takes to fulfill my responsibilities) reverse coded and "If I had to choose right now, I would prefer to do" on a 1 (take a trip around the world) through 7 (pay back my loans) reverse-coded scale.

Information-Condition Diagnosticity Manipulation Check Measure

Given a lack of an exact scale for this, we created two items that were modifications of two items from Lastovicka's (1983) advertisement relevance scale. The items were, "I found the available information on the opinions in the reviews, to be relevant in specifying the price range for the HP ARTIST laptop" and "I found the available information on the opinions in the reviews, to be very helpful in specifying the price range for the HP ARTIST laptop" on a 1 (strongly disagree) to 7 (strongly agree) scale.

Highest & Lowest Acceptable Price

Participants specified their highest-acceptable price by responding to the item, "What is the highest (i.e. maximum) price (in dollars) that you would be willing to pay for the HP Artist laptop?" Participants specified their lowest-acceptable price by responding to the item, "What is the lowest (i.e. minimum) price (in dollars) that you would be willing to pay for the HP Artist laptop?". We specifically informed our participants that if they specified

a lowest acceptable price that is too low, then the seller from the Ebay-like website may not accept it and hence they might not win the laptop. Additionally, we also warned our participants that if they specify a very low lowest price and the seller accepts it, then it can potentially mean that the laptop is of suspect quality and hence the seller agreed to sell it a low price. Finally, we informed our participants that the lowest acceptable bid price they specify should such that they will not regret one bit if that specific price was not acceptable to the seller even though a slightly higher lowest price could have been acceptable to the seller.

We believe that this character of our procedure makes the concept of a lower limit of the acceptable price range a more tangible one and will induce our participants to truly hold a meaningful lower price limit. This was the entire reason for our informing our participants that they were bidding for the laptop on an Ebay-like website and not on Ebay itself, given that in reality, Ebay does not require bidders to specify a lowest acceptable bid price.

The acceptable price range will be calculated by subtracting the participants' lowest offer price from their highest offer price.

Decision Ease

Two decision ease items were created by adapting items in Park, Jun and MacInnis 2000. The items were, "Given this situation, I believe that most people like me will find it easy to come up with their maximum and minimum prices for the HP Artist laptop." and "It took me a lot of mental effort, to come up with an acceptable price range (i.e. maximum and minimum prices) for the HP Artist laptop (reverse coded)" on a 1 (strongly

disagree) to 7 (strongly agree) scale. This item was a modification of the decision ease item used in Park, Jun and MacInnis (2000)..

Purchase Commitment

We used two modified items from purchase intention scale from Dodds, Monroe and Grewal (1991). They were, "I specified the price range (i.e. maximum and minimum prices) for the HP Artist as if I am very likely to purchase it." and "I specified the price range (i.e. maximum and minimum acceptable prices) for the HP Artist, believing that purchasing it is the correct decision for me." on a 1 (strongly disagree) to 7 (strongly agree) scale.

High-Level Product Construal:

The high-level (i.e. global) construal of the target laptop was measured with the item "When specifying the price range (i.e. the maximum and minimum prices), I emphasized on how useful will the HP Artist laptop be as a comprehensive computing equipment, rather than simply focusing on how useful is each of its individual features." on a 1 (strongly disagree) to 7 (strongly agree) scale.

Low-Level Product Construal:

The low-level (i.e. concrete) construal of the target laptop was measured with the item "In coming up with the price range (i.e. the maximum and minimum prices), I also emphasized on the benefit of each individual feature in the HP Artist." on a 1 (strongly disagree) to 7 (strongly agree) scale.

It is important to note that we did not interpret the level of product construal on a bipolar scale. We believe that there is a distinct possibility that high-level product construal and

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low-level product construal are not necessarily polar opposites. As such, we leave open

the possibility that consumers may construe a single product simultaneously at a high

and at a low level. This may hold true, especially for product experts.

Appendix B presents the instrument used in this study.

CHAPTER 9

RESULTS AND DISCUSSION

9.1 Manipulation Checks

Manipulation Checks

We executed a two-factor ANOVA on the Regulatory-Focus Manipulation Check

Measure, where regulatory focus and information condition were the two factors. The

main effect of regulatory focus marginally significant (M's 13.2 Vs. 12.09; F=4.78;

p<0.05). Based on this, we infer that the regulatory focus manipulation has worked.

Next, we executed a two-factor ANOVA on the information-condition manipulation check

measure. As expected, the main effect of the information condition is significant (F=75.2;

p<0.05). The mean values for perceived diagnosticity under the conditions of favorable-

only information, unfavorable-only information condition, both favorable and unfavorable

information condition, and absence of information condition were 8.17, 8.06, 4.85 and

0.016 respectively. This suggests that the 3 information conditions where extrinsic

information was present did tend to utilize that

Next, we discuss the results of the ANOVA analysis that we executed on the upper and

lower limits of the acceptable price range, and on the acceptable price range. The

detailed results for the ANOVA analyses are presented in Table 2.

Table 2
ANOVA Results

Dependent Measure	Source	F Value	Promotion-Oriented				Prevention-Oriented			
			Favorable Information Only	Unfavorable Information Only	Both, favorable & unfavorable information	No Information	Favorable Information Only	Unfavorable Information Only	Both, favorable & unfavorable information	No Information
Upper Limit of Price Range	Reg-Focus	1.03	865.90 (55.15)	840.63 (55.15)	815.79 (52.8)	832.60 (53.94)	957.61 (56.45)	805.58 (52.80)	958.05 (60.97)	793.76 (56.76)
	Info	1.5								
	Interaction	1.33								
Lower Limit of Price Range	Reg-Focus	0.71	525.00 (44.68)	499.75 (44.60)	545.72 (42.77)	528.26 (43.69)	536.42 (45.73)	499.75 (42.75)	522.22 (49.39)	428.57 (45.70)
	Info	0.70								
	Interaction	0.64								
Acceptable Price Range	Reg-Focus	4.72 *	340.90 (43.26)	344.56 (43.21)	270.00 (41.41)	304.34 (42.31)	421.19 (44.29)	305.83 (41.41)	435.83 (47.82)	365.19 (33.27)
	Info	0.64								
	Interaction	1.87								
Decision Ease	Reg-Focus	4.28 *	10.36 (0.496)	10.27 (0.47)	9.95 (0.47)	10.34 (0.48)	9.76 (0.50)	9.27 (0.54)	9.27 (0.54)	9.52 (0.50)
	Info	0.27								
	Interaction	0.02								

* indicates p-value of 0.05 or lower

9.2 Upper Limit of The Acceptable Price Range (Highest Acceptable Price)

The main effects of regulatory focus and that of the information condition were not

significant. Neither was the interaction effect significant. For promotion-oriented

participants, none of the contrasts on the highest acceptable price, across the 4

information conditions, taken two at a time, were significant for the upper limit of the acceptable price range. Essentially, the highest acceptable price levels, for promotion-oriented participants across the 4 information conditions, was essentially similar.

For prevention-oriented participants, the upper price limit of the acceptable price range for the condition where only favorable extrinsic information is present is significantly higher than that for the condition where extrinsic information was absent (M's 957.61 vs.793.76; F=4.21; p <0.05). Further, the upper price limit for the acceptable price range for the condition where both favorable and unfavorable extrinsic information is present is also significantly higher than that for the condition where extrinsic information was absent (M's 958.05 vs. 793.76; F=3.91; p < 0.05). Other contrasts were not significant. These results for the upper limit of the acceptable price range suggest support for the "asymmetric-elaboration account, over the "regulatory-fit" account.

9.3 Lower Limit of The Acceptable Price Range (Lowest Acceptable Price)

The main effect of regulatory focus and information condition were not significant. Neither was the interaction effect significant. For both, promotion-oriented participants, none of the contrasts across the 4 information conditions, taken two at once, were significant even for the lower limit of the acceptable price range. Essentially, the lowest acceptable price, for promotion and prevention-oriented participants across the 4 information conditions, was essentially similar.

The lowest acceptable price across all the 8 cell conditions was clearly much above $0 and hence it may be assumed that our procedure was successful at eliciting a meaningful lower limit for the acceptable price range.

9.4 Width of Acceptable Price Range

The main effect of regulatory focus was significant (F=4.72; p <0.05). The main effect of information condition was not significant. Neither was the interaction effect significant. For promotion-oriented participants, none of the contrasts across the 4 information conditions, taken two at once, were significant for the acceptable price range. Essentially, the acceptable price range, for promotion-oriented participants, across the 4 information conditions, was essentially similar.

As suggested earlier, the primary focus of this research is to understand the difference in means for the dependent variable for the condition where extrinsic information is absent and the means for the other information conditions. In this context, for prevention-oriented participants, the mean value of the acceptable price range width for the condition where extrinsic information is absent is not significantly different from the mean value for any of the other 3 information conditions.

The other contrasts between mean values for acceptable price range are less relevant. Nevertheless, we find that for prevention-oriented consumers, mean value of the acceptable price range when only unfavorable information is present is significantly smaller than in the condition when both favorable and unfavorable information are present (M's 305.83 Vs. 435.83; F=3.2; p<0.05). Further, we find that the mean value of the acceptable price range when only unfavorable information is present is marginally smaller than in the condition when only favorable information is present (M's 305.83 Vs. 421.19, F= 3.61; p=0.06).

Finally, making the naive assumption that the average of the upper and lower limit of the acceptable price range resembles the single-point reference price, we find interesting

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implications. The averages of the upper and lower limit, for promotion-oriented participants across the 4 information conditions, were not statistically significant from one another. For prevention-oriented participants, the average for the condition where only favorable extrinsic information is present is significantly higher than that for the condition where extrinsic information was absent (M's 747.02 vs. 611.16; F=4.29; p <0.05). Further, the average for the condition where both favorable and unfavorable extrinsic information is present is marginally higher than that for the condition where extrinsic information was absent (M's 740.13 vs. 611.16; F=3.58; p =0.06). Other contrasts were not significant. Hence, the results for the average value of the price follows a trend similar to the one noted for the upper limit of the acceptable price range.

9.5 Decision Ease

The main effect of regulatory focus is significant. Participants under promotion-orientation did indeed find the task of specifying the acceptable price range to be easier than did participants under prevention-orientation (M's 10.23 vs. 9.50; F=64.17; p <0.05). Other effects were not significant. Promotion-oriented participants did experience higher ease in specifying the acceptable price range to be easier than that experienced by prevention oriented people.

Overall, our results suggest that for promotion oriented consumers, the mean values for all the three key dependent variables (namely, highest acceptable price, lowest acceptable price and the acceptable price range) do not vary when different combinations of extrinsic information on the product are present, in comparison when such information is absent. Further, none of the contrasts of means across the 4

information conditions for any of the 3 dependent variables was significant for promotion oriented consumers.

In contrast, in the context of the primary focus of this research, we find that for prevention-oriented participants, the mean values of the highest acceptable price varies systematically across the other 3 conditions, where extrinsic information on the product is present, in comparison to when such information is absent. Hence, our results display clear support for hypothesis H1$_{alternate}$ over that for hypothesis H1, in the contexts of the highest acceptable price.

Additionally, the changes in the levels of uncertainty in the quality of the product caused by the presence of different types of extrinsic information on the product, was diagnostic only in the context of the highest acceptable price of prevention-oriented. Hence their highest acceptable price varied systematically across the 4 information conditions. In contrast, the changes in the levels of uncertainty caused by the presence of different types of information were not diagnostic in the context of the lowest acceptable price of prevention-oriented participants. Hence, their lowest did not vary systematically across the 4 information conditions. Given these results a reasonable guess would have been that the range width too would have varied systematically in following the same trend as the highest acceptable price. However, our range width contrast results don't lend support for this notion.

A study of the significance of contrasts of the mean values of the highest acceptable price across information conditions for prevention-oriented participants can provide us some interesting implications. We find that for prevention-oriented consumers, the mean for the highest acceptable price when no information is present is not significantly

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different from the mean for the condition when only unfavorable condition is present. Additionally, the mean for the highest acceptable price when no extrinsic information is present is significantly lower than those in the conditions when only favorable information is present and when both favorable and unfavorable information are present. Hence, for prevention-oriented participants, it seems that not being exposed to any extrinsic information on the product is essentially the same as being exposed ton only unfavorable extrinsic information on the product, in the context of their influence on their highest acceptable price. Further, for prevention people, it seems that only the presence of favorable information, irrespective of the presence or absence of concurrent unfavorable information, holds the capability of pushing the highest acceptable price upwards in comparison to when information on the product is absent. Overall, for prevention-oriented participants, the presence of favorable information seems to trump the presence of unfavorable information. For prevention-oriented participants, the mean of the highest acceptable price in the presence of both favorable and unfavorable information is statistically not different from the mean of the highest acceptable price in the presence of only favorable information.

The managerial implication of this finding should be clear. The absence of any extrinsic information on the product has the same influence as the presence of unfavorable extrinsic information on the product, on prevention-oriented consumers' highest acceptable price. Further, for prevention-oriented consumers, the presence of both favorable and unfavorable extrinsic information on the product has the same influence as does the presence of only favorable extrinsic information on the product. Favorable information can raise prevention-oriented consumers' highest acceptable price by itself, and even in the presence of unfavorable extrinsic information. Given this, we can draw the general implication that managers need to ensure that when it comes to prevention-

oriented consumers, the shopping environment for a specific product has to present favorable information on that product.

In the context of the lower price limit of prevention-oriented participants, our results suggest that 2 of 3 contrasts between the means of the lower price limit for the control condition and the 3 information conditions are marginally significant. Given that these contrasts for the lower price limit are not statistically significant, we do not bestow much weight to that result. Further, none of these 3 contrasts for the lower price limit are even marginally significant in study 2 data.

In the context of the width of acceptable prices of prevention-oriented consumers, we find that certain contrasts are indeed significant. However, from the perspective of the primary focus of this research, we do not find systematic differences for prevention-oriented consumers' width of the range of acceptable prices. Essentially, their range widths do not vary systematically across the 3 information-availability conditions in comparison to the control condition where information was absent.

9.6 Results – Model A, B and C

The results of Models A, B and C are presented in Tables 6, 7 and 8 respectively. We identified all the models based on the measures that have been laid out in the measures section. For regulatory focus level and perceived diagnosticity of consensus information measures, we used the manipulation check measures laid out for the regulatory focus and consensus-information conditions.

9.6.1 Model A Results

Model A results appear in Table 3. The results showed that for promotion-oriented consumers, per expectations, decision ease, purchase commitment level and the high-level of product construal were all significant predictors of the range of acceptable price. In line with expectations, perceived diagnosticity of consensus information was not a significant predictor of price range for promotion-oriented participants.

For prevention-oriented consumers, per expectations, regulatory focus level, decision ease and perceived diagnosticity of the consensus information are significant predictors of the price range. However, counter to expectations, low-level construal of the product and purchase commitment were not significant predictors of the price range for prevention-oriented consumers. Additionally, the interaction effect between decision ease and perceived diagnosticity of consensus information was a significant predictor of price range for prevention-oriented participants.

Table 3
Model A Results

Model A: Dependent Variable: Price Range

Predictor	Promotion-Oriented Participants	Prevention-Oriented Participants
Intercept	327.1	931.67 *
Regulatory Focus Level	16.65	-55.52 *
Decision Ease	-41.17 *	-98.65 *
Purchase Commitment	28.33 *	14.62
Low Level Construal	-3.25	0.7
High Level Construal	43.31 *	2.27
Consensus Information Diagnosticity	10.77	-131.9 *
Regulatory Focus Level * Consensus Information Diagnosticity	1.87	15.35 *
Decision Ease * Consensus Information Diagnosticity	3.92	15.03 *
Purchase Commitment * Consensus Information Diagnosticity	-2.61	-2.51
Low Level Construal * Consensus Information Diagnosticity	-5.8	4.26
High Level Construal * Consensus Information Diagnosticity	3.71	.03
Sample Size	117	112
Log Likelihood	-719.02	-754.35
AIC	12.54	13.73

* indicates p-value of 0.05 or lower

9.6.2 Model B Results

Model B results appear in Table 4. In line with expectations, for promotion-oriented

participants, decision ease, purchase commitment, high-level construal of the product

and the lower limit of the price range are significant predictors of the upper limit of the

price range. Also, in line with expectations, the perceived diagnosticity of consensus

information is not a significant predictor of the upper limit for promotion-oriented

participants. Additionally, the interaction between decision ease and perceived

diagnosticity of consensus information, and the interaction between lower limit of price

range and perceived diagnosticity of consensus information were significant predictors of

the upper limit.

Table 4
Model B Results

Model B: Dependent Variable: Upper Limit of Acceptable Price Range
(The upper limit is assumed to be censored above $1100 and below $650. $1100 and
$650 are the extremities for the middle 90% of the distribution of specified lower limit.)

Predictor	Coefficients for Promotion-Oriented Participants	Coefficients for Prevention-Oriented Participants
Intercept	8.9 *	8.86 *
Regulatory Focus Level	0.03	-0.44 *
Decision Ease	-0.62 *	-0.4 *
Purchase Commitment	0.157 *	0.12
Low Level Construal	-0.2	0.34 *
High Level Construal	0.41 *	0.07
Lower Limit	0.66 *	0.08
Consensus Information Diagnosticity	-0.61	-0.88 *
Regulatory Focus Level * Consensus Information Diagnosticity	0.017	0.147 *
Decision Ease * Consensus Information Diagnosticity	0.096 *	0.055
Purchase Commitment * Consensus Information Diagnosticity	0.000	-0.01
Low Level Construal * Consensus Information Diagnosticity	-0.06	-0.02
High Level Construal * Consensus Information Diagnosticity	0.045 (p = 0.09)	-0.01
Lower Limit * Consensus Information Diagnosticity	-0.09 *	0.05 *
Sample Size	117	112
Log Likelihood	-198.46	-228.33
AIC	3.76	4.39

* indicates p-value of 0.05 or lower

Most all predictors were measured on a 1 to 7 scale, while upper and lower limits were in 100's. Hence, to avoid problems in model identification due to difference in scales between different predictors and dependent variable, the upper and lower limits of price range were recoded by dividing them by 100 for models B, C, E and F. For example, a price of $700 was recoded as $7. Models B, C, E and F were identified using the recoded upper and lower price limits.

For prevention-oriented participants, in line with expectations, the level of regulatory focus, decision ease, purchase commitment, low-level construal of the product and the diagnosticity of the consensus information are significant predictors of the upper limit of the price range. Additionally, the interaction effect between regulatory focus level and perceived diagnosticity of consensus information and the interaction between the lower price limit and perceived diagnosticity of consensus information were significant predictors of the upper limit of the price range.

9.6.3 Model C Results

Model C results appear in Table 5. For promotion-oriented participants, only the upper limit of the price range was a significant predictor of the lower limit of the price range. Additionally, the interaction between the upper price limit and the perceived diagnosticity of consensus information was a marginally significant predictor of the lower price limit. However, counter to our expectations, decision ease, purchase commitment and the high-level construal of the product were not significant predictors of the lower limit of the price range, for promotion-oriented participants.

Table 5
Model C Results

Model C: Dependent Variable: Lower Limit of Acceptable Price Range
(The lower limit is assumed to be censored above $700 and below $100. $700 and $100
are the extremities for the middle 90% of the distribution of specified lower limit.)

Predictor	Coefficients for Promotion-Oriented Participants	Coefficients for Prevention-Oriented Participants
Intercept	0.56	-5.69 *
Regulatory Focus Level	0.08	-0.53 *
Decision Ease	0.55 (p = 0.06)	-0.22
Purchase Commitment	-0.42	-0.19
Low Level Construal	0.12	0.54 *
High Level Construal	-0.17	0.133
Upper Limit	0.79 *	0.68
Consensus Information Diagnosticity	-0.2	1.5 *
Regulatory Focus Level * Consensus Information Diagnosticity	-0.067	-0.137 *
Decision Ease * Consensus Information Diagnosticity	-0.096	-0.001
Purchase Commitment * Consensus Information Diagnosticity	0.069	0.08 *
Low Level Construal * Consensus Information Diagnosticity	-0.02	-0.197 *
High Level Construal * Consensus Information Diagnosticity	0.09	-0.06
Upper Limit * Consensus Information Diagnosticity	-0.09 (p=0.09)	-0.06 (p =0.06)
Sample Size	117	112
Log Likelihood	-225.8	-207.32
AIC	4.15	4.00

* indicates p-value of 0.05 or lower

For prevention-oriented participants, in line with expectations, the level of regulatory focus, low-level construal of the product and the perceived diagnosticity of the consensus information are significant predictors of the upper limit of the price range. However, counter to expectations, decision ease and purchase commitment did not significantly predict the lower limit of the price range. This may, however, be mitigated by the observation that the interaction between purchase commitment and perceived diagnosticity of consensus information was a significant predictor of the lower limit. Further, the interaction between regulatory focus and perceived diagnosticity of consensus information and that between low-level construal and perceived diagnosticity of consensus information were significant predictors of the lower limit of price range. Additionally, the interaction between the upper price limit and perceived diagnosticity of consensus information is a marginally-significant predictor of the lower limit of price range.

9.7 Discussion – Models A, B and C

The models A, B and C, which were aimed at generalizing the results to consumers within each of the two regulatory foci (but, irrespective of information condition that they are in), provide interesting findings. Overall, we find that these results generally support our expectations. We note some important implications though. Decision ease influences the acceptable price range for both the regulatory foci. However, our results show that decision ease significantly influences only the upper price limit and not and lower limit, for both the regulatory foci.

Additionally, we find that purchase commitment is a significant predictor of the price range and the upper and lower limits, but mainly for promotion-oriented consumers. It seems that prevention-oriented consumers tend to specify acceptable price levels

independently of their levels purchase commitment. However, we do note that purchase commitment's interaction with perceived diagnosticity of consensus information is a significant predictor of the lower price limit for prevention-oriented consumers. Other than that, we could not find any other evidence to suggest that purchase commitment has any influence on prevention-oriented consumers' price range.

The results generally support the notion that high-level construal of the product is an important determinant of the acceptable price range and its limits for promotion-oriented consumers. In contrast, the low-level construal of the product is an important determinant of the limits of the acceptable price range for prevention-oriented consumers. Further, it is important to note that as expected regulatory focus level, was not a predictor of the price range and of upper and lower limit, for promotion-oriented consumers.

The managerial implication of this finding on product construal should be clear. As an example, if it is known that a particular product is specifically targeted at a segment of consumers that can are promotion-oriented or are situationally primed to get promotion-oriented, then managers should highlight the high-level versatility and comprehensiveness of the product, in order to induce the customer to pay the highest amount possible. For example, it is known that trucks, manufactured by US auto firms, such as Ford etc. are typically purchased by people who live in the US and hence have a strong independent self construal. Such independent people tend to be overwhelmingly promotion-oriented (Aaker, Lee and Gardner 2001). Hence, Ford has to design advertising that induces such people to construe the product at a high level and also highlight the high-level aspects of the comprehensive vehicle, in order to raise their upper price limit. This may be possible by highlighting the overall effectiveness of Ford

trucks in their advertising, rather than providing a litany of individual features as is done in some of their advertising.

Further, these results seem to suggest that the upper and lower limits of the acceptable price range are complements to each other and they mutually influence each other, either directly or through an interaction with the consensus-information condition. They influence each other positively, however, in interactions with consensus-information condition, they may even influence each other negatively.

Finally and importantly, in line with Hypothesis $H_{1alternate}$, we find that consensus-information condition has a direct effect on the price range and upper and lower limits only for prevention-oriented and not for promotion-oriented consumers. These results are in line with the results of the ANOVA analyses. However, going beyond what the ANOVA analyses, the random-parameter regression analyses show that information conditions have the potential to interact with other variables and significantly influence price range and the upper and lower price limits for both promotion and prevention-oriented consumers.

9.8 Results – Models D, E and F

The results of Models D, E and F are presented in Tables 6, 7 and 8 respectively.

9.8.1 Model D Results

For the entire sample, decision ease, purchase commitment and high level construal of the product were significant predictors of the price range. The 3-way interaction between

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decision-ease, regulatory focus level and consensus information diagnosticity was also a

significant predictor of price range.

Table 6
Model D Results

Model D: Dependent Variable: Price Range

Predictor	Coefficient
Intercept	533.73 *
Decision Ease	-73.34 *
Purchase Commitment	7.72 *
Low Level Construal	5.7
High Level Construal	5.16 *
(Regulatory Focus * Consensus Diagnosticity)	-3.36
Decision Ease * (Regulatory Focus * Consensus Diagnosticity)	1.91 *
Purchase Commitment * (Regulatory Focus * Consensus Diagnosticity)	0.31
Low Level Construal * (Regulatory Focus * Consensus Diagnosticity)	-0.3
High Level Construal * (Regulatory Focus * Consensus Diagnosticity)	-1.2 (p=0.6)
Sample Size	229
Log Likelihood	-468.65
AIC	4.26

* indicates p-value of 0.05 or lower

9.8.2 Model E Results

For the entire sample, per expectations, decision ease, low-level construal of the

product, and the lower limit of the acceptable price limit were significant predictors of the

upper limit of the acceptable price range. Additionally, the 3-way interaction between

purchase commitment, regulatory focus level and consensus information dignosticity

was significant predictors of the upper limit. Finally, the 3-way interaction between high-

level product construal, regulatory focus level and consensus information dignosticity

was also significant predictors of price range.

Table 7

Model E Results

Model E: Dependent Variable: Upper Limit of Acceptable Price Range
(The upper limit is assumed to be censored above $1100 and below $650. $1100 and
$650 are the extremities for the middle 90% of the distribution of specified upper limit.)

Predictor	Coefficient
Intercept	6.66 *
Decision Ease	-0.38 *
Purchase Commitment	0.034
Low Level Construal	0.22 *
High Level Construal	0.154
Lower Limit	0.269 *
(Regulatory Focus * Consensus Diagnosticity)	-0.009
Decision Ease * (Regulatory Focus * Consensus Diagnosticity)	0.008 *
Purchase Commitment * (Regulatory Focus * Consensus Diagnosticity)	0.004 *
Low Level Construal * (Regulatory Focus * Consensus Diagnosticity)	-0.0052
High Level Construal * (Regulatory Focus * Consensus Diagnosticity)	0.0123 *
Lower Limit * (Regulatory Focus * Consensus Diagnosticity)	0.0013
Sample Size	229
Log Likelihood	-452.68
AIC	4.11

* indicates p-value of 0.05 or lower

9.8.3 Model F Results

For the entire sample, per expectations, decision ease, low-level construal of the

product, and the upper limit of the acceptable price limit were significant predictors of the

lower limit of the acceptable price range. Additionally, the 3-way interaction between

lower limit, regulatory focus level and consensus information dignosticity was significant

predictor of the upper limit.

Table 8
Model F Results

Model F: Dependent Variable: Lower Limit of Acceptable Price Range
(The lower limit is assumed to be censored above $700 and below $100. $700 and $100
are the extremities for the middle 90% of the distribution of specified lower limit.)

Predictor	Coefficient
Intercept	-2.99 (p = 0.1)
Decision Ease	-0.55 *
Purchase Commitment	-0.105
Low Level Construal	0.097 *
High Level Construal	0.03
Upper Limit	0.76 *
(Regulatory Focus * Consensus Diagnosticity)	0.101
Decision Ease * (Regulatory Focus * Consensus Diagnosticity)	-0.013 (p = 0.09)
Purchase Commitment * (Regulatory Focus * Consensus Diagnosticity)	0.002
Low Level Construal * (Regulatory Focus * Consensus Diagnosticity)	-0.001
High Level Construal * (Regulatory Focus * Consensus Diagnosticity)	0.007
Upper Limit * (Regulatory Focus * Consensus Diagnosticity)	0.011 *
Sample Size	229
Log Likelihood	-468.65
AIC	4.25

* indicates p-value of 0.05 or lower

9.9 Discussion – Models D, E and F

The models D, E and F, which were aimed at generalizing the results to the consumer in general (irrespective of their regulatory focus and the information that is available to them), provide some unique inputs. An important finding is that the price range is influenced by the level of ease experienced in specifying the price limits and by the high-level construal of the product. Additionally, both the limits of the price range are influenced by the low level construal of the product and by the level of ease experienced by the consumer. Finally, just as in the case with models A, B and C, we again find that the two limits of the price range mutually influence each other.

There is plenty of evidence in prior literature that the level of purchase commitment and likelihood affects willingness to pay. Hence, our finding that purchase commitment influences consumers' price range is not surprising and is not unexpected. We believe, however, that this research is the first in outlining other new and unique insights to pricing literature. Based on our literature review, we speculated that individual differences may exist in the level of difficulty experienced by consumers in specifying their price range and willingness-to-pay. The results of models D and E provide general support to this conjecture.

Finally, this research is also unique in pointing out that the two end limits of consumers' acceptable price range influence each other. This finding suggests that consciously or subconsciously, consumers seem to be aware of what their lowest acceptable price is, when specifying their highest acceptable price, and vice versa.

CHAPTER 10

GENERAL DISCUSSION

In this paper, we attempt to understand the influence of regulatory focus and availability of external information in the environment, on consumers' acceptable price range. Our literature review indicates divergent hypotheses. Certain evidence in literature in regulatory focus theory points to the regulatory-fit account. If this holds, then both promotion and prevention-oriented consumers should find relevant aspects of external information, which helps them achieve a regulatory-fit, to be diagnostic in specifying their acceptable prices. In contrast, other evidence in extant regulatory focus theory literature points to the asymmetric-elaboration account. If this holds then only prevention-oriented consumers should find all external information diagnostic in specifying their price acceptance, while promotion-oriented consumers should disregard external information. Our results suggest support for the asymmetric-elaboration account.

Further, we review literature that indicates that the same product can be construed at different levels under the influence of different regulatory foci. We conjecture that these differences in product construal may be influencing price acceptance. Our results show that for promotion oriented consumers, only high-level construal of the product influences the acceptable price range and its limits. Conversely, we find that for prevention-oriented consumers, only their low-level construal of the product influences the acceptable price range and its limits.

In this research, we reviewed findings in regulatory-focus theory that pointed to divergent hypotheses. Beyond focus of the current research on diagnosticity of information, we also find other evidence of seemingly-contradictory findings in regulatory-focus research. For example, Chernev (2004 A) proposes that prevention-oriented consumers are more

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likely to opt for the default option and retaining status quo, than are promotion-oriented consumers. Yet, Louro, Pieters & Zeelenberg (2005) find that despite their higher levels of satisfaction with their current suppliers, prevention-oriented consumers are less likely, than are promotion-oriented consumers, to shop from the same supplier. Normatively speaking, we argue that shopping from the current supplier would have been the status quo, especially when if prior experiences with that supplier have been highly satisfactory. Given this, it should have been prevention-oriented consumers who retain the current supplier that they are satisfied with. As such, Louro et al. findings are not exactly in line with those made by Chernev's (2004 A).

Similarly, Mourali, Bockenholt and Laroche (2007) argue that promotion (prevention) oriented consumers are more (less) likely to be sensitive to the presence of a dominant brand in their consideration set. As such Mourali et al. argue that promotion (prevention)-oriented consumers will likely (not) choose the dominant brand, given that promotion-oriented (prevention-oriented) consumers tend to (tend not to) undertake heuristic processing. Again, we consider this proposition to be in disagreement with normative expectations in regulatory focus theory. Normatively speaking, we argue that a dominant brand, given that it is well established should be perceived to be less risky and viewed as the default option. Hence, prevention-oriented consumers should actually opt for the dominant brand, over the non-dominant brand, if Chernev's proposition holds.

Further, Wang and Lee (2006), propose that consumers should actively seek only that information which helps them achieve regulatory fit, provided their levels of motivation is low. Given this, perhaps, an explanation for the lack of support for the regulatory-fit account in our study may lie in the unexpected outcome that the participants in our study had higher levels of motivation, despite that we did not manipulate motivation or

involvement. However, Wang and Lee also propose that under higher levels of motivation, consumers should find substantive information diagnostic, irrespective of their regulatory focus. However, our results are not in line with this either. Our results suggest that only prevention-oriented consumers found the external consensus information to be diagnostic, while promotion-oriented consumers disregarded it, when it came to specifying their acceptable price range.

Additionally, Monga and Zhu's (2005) findings are in contrast to those by Wang and Lee's. Monga and Zhu find that consumers accomplish regulatory-fit only if their level of motivation is high, but not when their level of motivation is low. However, these diametrically contrasting findings by Monga and Zhu too can be explained on the basis of the fact that in Monga and Zhu's case, regulatory focus was situationally-aroused, while Wang and Lee had primed regulatory focus. Additionally, Monga and Zhu's studies included framing manipulations which could have had their own influence, while Wang and Lee's studies did not include framing manipulation.

An alternative explanation may be able to reconcile the differences in the propositions made by Monga and Zhu (2005) and Wang and Lee (2004). Perhaps, an inverted-U relationship may exist between the level of motivation and regulatory-fit. What Wang and Lee (2005) refer to as low and high levels of motivation may actually be low and moderate levels of motivation. Additionally, what Monga and Zhu refer to low and high levels of motivation may actually be moderate and high levels of motivation. As such, this reconciliation purports that regulatory fit is experienced under low and high levels of motivation, but not under moderate levels of motivation.

This discussion suggests that further research is needed in regulatory focus in order to produce empirical generalizations. Our take is that current research in regulatory focus seems to be producing exciting findings, but which are manipulation, situation or circumstance specific.

Pham and Higgins' (2004) discussion of Zhou's (2002) work may be relevant in this case. Pham and Higgins refer to prior work by Zhou (2002) who studied how participants' regulatory focus influenced their choices in the presence of tricky choices. In his studies, Zhou offered his participants choices such that the less risky option was not clearly the one that offered a clear-cut opportunity to prevent losses. Such choices could be tricky and difficult for prevention-oriented participants to appreciate. Such tricky choices may potentially lead to unexpected results. Zhou's manipulations also lay out similar tricky options where the riskier option is not the one that helps them achieve high gains. Again, such options can be potentially difficult for promotion-oriented consumers to interpret and hence can lead to unexpected outcomes. Our take is that Pham and Higgins propose that researchers need to lay out a detailed analysis on how their participants will interpret such cues and then make propositions.

As laid out by Pham and Higgins, we made an effort to anticipate the reason for differential diagnosticity of consensus information as was predicted in the asymmetric elaboration account. We therefore added the decision ease measures in our questionnaire to confirm if indeed the participants in the two distinct regulatory foci indeed experienced different levels of difficulty in specifying their acceptable price range.

Further, the random-parameters models that we implemented also provide important implications. As discussed earlier, the level of product construal was found to be an

important predictor of the acceptable price range and its limits. In that regard, the results of our random-parameter models are in line with those outlined by Keller et al., who propose that consumers develop more favorable attitudes towards the stimulus, when the stimulus is described at a level that fits the consumers' regulatory focus. Our results suggest that for promotion (prevention) oriented consumers, high (low) level construal of the product that significantly predicts these dependent measures. What was different about our study was that, participants were not provided any specific level of product construal, as was the case with Keller et al's manipulations. Our participants were free to construe the product at the level that they felt was appropriate. In fact, our study enabled participants to specify their intensity for both high and low level product construals. Yet, our participants chose to dwell on the construal level that fit their regulatory focus. Hence, our findings are an extension of those forwarded by Keller et al.

Secondly, the results of the random-parameters model suggest that the level of product construal may just be as relevant a predictor of acceptable price range and its limits, as is the level of purchase commitment. Our results suggest that product construal level was significant in the predicting these dependent measures, in the presence of purchase commitment. Given that much research already exists on the relationship between purchase commitment and price acceptance, we exhort future research to delve into the relationship between product construal level and price acceptance.

Finally, the results of random-parameters models suggest that in the general population of consumers, lower limit and upper limit of price acceptance have a mostly positive-direct relationship with each other. This may present another important managerial implication. If a product manager intends to renders strategic moves to push her

product's upper acceptable price limit upwards, it may be important for her to ensure that the product's lower price limit is pushed upwards as well.

10.1 Additional Managerial Implications

Consumers exposed to advertising messages that highlight independent (interdependent) selves are likely to harbor promotion (prevention) tendencies (Hamilton and Biehal 2005). Hence, given the findings of our paper, we argue that advertising messages that induce promotion tendencies through inducing independent self may not be effective in shaping such consumers' acceptable price range, if such ads highlight substantive information such as consensus information as a means of persuasion. Pham and Avnet (2004) propose that promotion (prevention)-oriented consumers find affective association with (substantive information about) the stimulus more appealing. Based on this, one may argue that promotion (prevention)-oriented consumers should have a higher willingness to pay for products high on aesthetics and affect (utilitarian aspects), thus even pushing the upper limit of the price range upwards. Hence, in lines with Pham and Avnet (2004), such advertising may be more effective at influencing the acceptable price range if it includes attractive visual imagery. In contrast, we argue that advertising messages that induce prevention tendencies may be effective in shaping such consumers' acceptable price range, if such ads have substantive information such as consensus information as a means of persuasion.

Further, our finding that the level of construal of the product impacts price range and limits, too has important implications. High-level construal of the product is an important determinant of the acceptable price range and its limits for promotion-oriented consumers. In contrast, the low-level construal of the product is an important determinant of the acceptable price range and its limits for prevention-oriented

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consumers. Given this, managers will be wise if they cater their advertising messages in line with this paradigm. We thus argue that advertising messages that induce promotion tendencies may be more likely to influence consumers' acceptable price range if they also highlight the product's overall abilities rather than highlighting its nitty-gritty features. In contrast, advertising messages that induce prevention tendencies may be more likely to influence consumers' acceptable price range if they highlight the product's feature detail rather than its overall capabilities. For instance, insurance advertisements may situationally induce prevention concerns in the consumers. Such an advertisement may be more effective at increasing upper price limit, if it also highlights key individual features of the insurance policy, rather than highlighting the overall summary of the insurance policy.

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PART TWO

HOW CONSUMER CHOICES DIFFER OVER A SERIES OF GAINS OR LOSSES: A

REGULATORY FOCUS PERSPECTIVE

CHAPTER 11

INTRODUCTION TO PART 2

Prior research in regulatory focus theory delves mainly on behavioral differences in one-time gain versus one-time loss situations. Lee and Aaker (2004), for instance, propose that people in promotion (prevention) mode, perceive themselves to be less (more) susceptible to negative outcomes, and more (less) susceptible to positive outcomes, and hence find positively-framed (negatively-framed) messages to be more persuasive. An important aspect of such framing is that the initial starting anchors do not vary across the frames. On similar lines, Idson, Liberman and Higgins (2000) propose that the pleasure from achieving a maximal goal (the standard that one wants to achieve) will be experienced more intensely by promotion oriented participants, versus prevention oriented participants. Likewise, they find that the pain from the failure to achieve the minimal goal is felt more intensely by prevention oriented participants versus promotion oriented people. However, such instances of distinction between persuasive powers of differential framing have invariably been studied in instances where only one-time losses or gains are involved. In contrast, the current research focuses on how regulatory-focus differences lead to disparity in choices that involve a series of losses or gains.

Extant research proposes that differences in regulatory foci, should lead to differences in consumers' value function. Based on differences in shapes of their value curve, we propose that people, under distinct regulatory foci, will display systematic differences, in their likelihood of integrating multiple gains versus segregating multiple gains. We then delve into the main focus of this paper – how differences in the shape of the value functions due to differences in regulatory focus, interact with option framing. In the

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additive (subtractive) option frame, consumers are presented with a base (fully-loaded) model and are asked to add (delete) options that they want (don't want). Option framing literature proposes that consumers should choose higher number of (fewer) options when the product is presented in the subtractive (additive) frame. An important distinction of this paradigm, in the context of option frames, is that option framing leads consumers to have varied initial anchoring points. In additive (subtractive) frame, consumers are presumed to anchor at the options present in fully-loaded (base) model.

We find that prior research has separately probed the individual influence of option framing (Park, Jun and MacInnis 2000) and of regulatory focus (Lee and Aaker 2004) on consumer choice and persuasion. However, a study dedicated to understanding the influence of the interaction between these two, is lacking. The current research attempts to fill this void. Our research goes beyond Park et al.'s seminal work on the effect of regret manipulation and option frame interaction, mainly on the number of options chosen. While Park et al. chiefly focus on the main effects of option framing, we firstly study the effect of the interaction between regulatory focus and option frame on additional dependent variables such as the amount of time taken and decision difficulty etc. Secondly, we study the effect of the other covariates, such as task enjoyment, value perceived in options chosen and purchase commitment on the amount of time taken to make the decision and on the number of options chosen, in the presence of option framing and regulatory focus. Thirdly, in addition to a linear ANCOVA model, we also model a non-linear two-step model of the influence of the endogenous covariate, time taken to make the decision, and other covariates, such as value perceived in options chosen, task enjoyment and purchase commitment, on the number of options chosen. Finally, we demonstrate that the value perceived in the options chosen, mediates the relationship between regulatory focus and purchase commitment.

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This paper is laid out as follows. At first, we review literature on regulatory focus and how people's regulatory focus and differences in goal orientation can lead people to perceive the same outcome differently. We then present a framework on how the suggested differences in the shapes of the value functions lead consumers to display different likelihoods of integrating (segregating) losses (gains). Further, we review literature on framing in general, and more specifically on options framing. We focus the rest of the paper on one specific illustration of this phenomenon, namely, the interaction between regulatory focus and option framing. We present several hypotheses on the influence of this interaction on key dependent variables. Additionally, we present a two-step estimation model on the influence of time taken to make the decision, and other key predictors, on the number of options chosen. We utilize this estimator in improving the estimates of our ANCOVA analyses. Finally, we detail the results of two studies that we undertake to find support for the hypotheses. We end with managerial implications of the findings from study 1, and lay out an agenda for future research.

LITERATURE REVIEW AND HYPOTHESES

12.1 Regulatory Focus Theory

Research in regulatory focus effects has become influential in understanding how people's goal motivation influences their strategy and choices. Regulatory focus theory (Higgins 2000) proposes that people have two broad strategies of cognition, namely, promotion focus and prevention focus. Extant research suggests that specific levels of regulatory foci can be chronically instilled (Lockwood, Jordan and Kunda 2002), or can be situationally primed (Zhou and Pham 2004). Promotion focus emphasizes eager pursuit of the desired state in order to reach the final goal, while prevention focus emphasizes vigilant avoidance of undesired states in reaching the final goal. Current research in Social Psychology (see Higgins 2006 for a review) and consumer research (Lee and Aaker 2004; Keller 2006 etc.) suggests that these two self-regulatory strategies of reaching the final goal instigate people to undertake distinct approaches in decision-making.

12.2 Goals as Reference Points

Heath, Larrick and Wu (1999) argue that people's goals serve to identify their reference points, and thereby help systematically alter the perceived value of outcomes. For instance, consider a person who sets a goal of achieving a score of 90 in a test, ends up scoring 87 points. In contrast, a second person, who sets a goal of achieving the highest possible score, ends up scoring 83. Note that the first person is in the loss domain of her value function, while the second person is in the gains domain of her value function.

Given this, the second person will experience a higher level of satisfaction, despite scoring lower than the first person.

The evidence presented by Heath et al. suggests that the goal that an individual sets for herself identifies the reference point of her value function. If that individual's actual score is below (above) her targeted score, she lies in the loss (gains) domain. By relying on prospect theory's value function, we can gain insight into the level of (dis)satisfaction that this individual experiences, and how much marginal effort will she put in achieving her goal target. We will rely on this finding in the context of option framing, where being in the additive frame is expected to establish the options available in the base model as point of reference, while being in the subtractive frame is expected to establish the options available in the fully-loaded model as the point of reference.

12.3 The Compounded-Differential-Utility Framework

Chernev (2004) argues that promotion-oriented (prevention-oriented) people's utility curve should have a steeper (gentler) slope on the gain side because they give higher (lower) weight to the gains involved, when evaluating a prospect. Conversely, prevention-oriented (promotion-oriented) people's utility curve should have a steeper-negative (gentler negative) slope on the losses side, given that they give higher (lower) weight to the losses involved, when evaluating a prospect. In other words, prevention-oriented consumers should have a stronger focus on averting possible losses, in comparison to promotion-oriented consumers. Based on this, we infer that promotion (prevention)-oriented people, versus prevention (promotion)-oriented people, perceive relatively bigger increases (decreases) in utility in actions that are associated with positive (negative) outcomes.

Taking this further, we argue that whenever a problem-solving approach involves a series of steps involving varied levels of gains and losses, promotion-oriented and prevention-oriented people will perceive different levels of overall gains and losses. We refer to this structure as the Compounded-Differential-Utility framework.

For instance, a promotion-oriented person will perceive the utility of a particular amount of gain (say, $100) to be more than that perceived by the prevention-oriented person. The prospect of going through this $100 gain twice, provides a total utility, which is perceived by the promotion-oriented person to be much larger, than that perceived by the prevention-oriented person. Hence, the difference between the total utilities perceived by the promotion-oriented person and prevention-oriented person is larger when both undergo a $100 gain twice than when they both undergo a $100 gain once.

An important distinction is that the difference between the utilities due to a single-small gain or losses may not be significantly different for promotion and prevention-oriented consumers. However, if this insignificant difference is repeated multiple times as happens in the case of a prospect that has multiple steps, this insignificant difference will implode and become perceptible. In other words, if both these persons undergo a series of similar gains, at some stage, we can infer that promotion-oriented people will perceive a significantly larger utility than will prevention-oriented people. The exact reverse prediction can be made in the case of a series of losses. Given this, we expect promotion (prevention)-oriented people, versus prevention (promotion)-oriented people, to display higher levels eagerness (vigilance) in undertaking prospects with multiple gains (losses).

We argue that this aspect of differential levels of utility has important implications in consumer research. Specifically, we identify three areas where such effects provide important managerial implication, namely, integration versus segregation and multiple versus single-price change (Thaler 1985; Mazumdar and Jun 1993), and additive and subtractive options framing (Park, Jun and MacInnis 2000). In the following sections, we discuss each of these three areas of study.

12.4 Integration versus Segregation – A Regulatory Focus Perspective

Given Heath et al.'s assertion that goals help identify reference points, it is reasonable to suggest that differences in regulatory-foci goal orientations lead consumers to have distinct reference points, when under promotion focus versus under prevention focus.

Thaler's (1985) hedonic-editing hypothesis proposes that people tend to segregate gains and integrate losses. In other words, Thaler proposes that people experience higher utility when they gain $25 twice, versus winning $50 once. However, based on the compounded-differential-utility framework, we infer that promotion-oriented people, versus prevention -oriented people, will experience larger utility due to the two individual $25 gains. Hence, promotion-oriented people should experience higher utility in gaining $25 twice rather than winning $50 once, in comparison to that experienced by prevention-oriented people. Putting these together, we conclude that promotion-oriented people are more likely to adapt segregation of gains, when compared to prevention-oriented people.

Thaler's hypothesis also suggests that people will experience a higher sense of loss and disutility, if they lose $25 twice, as compared to losing $50 once. Hence, using similar lines of argument as was done for the gains, we propose that prevention-oriented people

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should experience higher disutility due to two individual $25 losses rather than losing $50 once, in comparison to that experienced by promotion-oriented people. Hence, we conclude that prevention-oriented people are more likely to adapt integration of losses, when compared to promotion-oriented people.

Mazumdar and Jun (2003) extend Thaler's (1985) hypothesis to the context of single versus multiple price increase and decreases. Mazumdar and Jun argue that multiple price increases (decreases) are seen as multiple losses (gains), and hence are repeatedly integrated (segregated). Consumers will generally respond more positively (negatively) if they see multiple price decreases (increases) in comparison to when they see a single price decrease (increase) of equal amount. Hence, multiple price increases are perceived as multiple losses, while multiple price decreases are perceived as multiple gains. Extending this multiple-gain multiple-loss paradigm to regulatory foci, we argue that the magnitude of total gains (due to multiple price drops) for promotion-oriented consumers exceeds that for prevention-oriented consumers. Likewise, we expect the total magnitude of total losses (due to multiple price increases) for prevention-oriented consumers to exceed that for promotion-oriented consumers.

Hence, we argue that a significantly larger proportion of promotion-oriented people, versus a proportion of prevention-oriented group of people, to have a favorable opinion on multiple price decreases. Said differently, we expect promotion-oriented people, versus prevention-oriented people, to have a more favorable attitude towards multiple price decreases. In contrast, we argue that a significantly larger proportion of prevention-oriented people, versus a proportion of promotion-oriented group of people, to have an unfavorable opinion on multiple price increases. Likewise, we expect prevention-oriented

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people, versus promotion-oriented people, to have a relatively less-favorable attitude towards multiple price increases.

We thus propose the hypothesis:

H1:When faced with multiple gains (losses) or increases in gains (losses), promotion (prevention)-oriented participants, versus prevention (promotion)-oriented people, will show higher likelihood to segregate (integrate) multiple gains (losses), in general and in specific situations such as multiple price increases or reductions.

Next, we delve into the main focus of this paper – how differences in value functions due to differences in regulatory focus, interact with option framing. First, we identify what option framing denotes and what the main findings in this domain of research are. We then examine the influence of the interaction between regulatory focus and option framing, on consumer choice, and present hypotheses on key dependent variables.

12.5 Option-Framing Becoming More Pervasive?

We propose that with the proliferation of new distribution media and of new product trim lines, option framing may be becoming a more relevant concern now, than it was in the past. For example, car salespersons initiate customer interactions starting off either with a fully-loaded car model and enabling customers to strip down options, or with a base model and enabling customers to add options. Certain computer manufacturers' websites (e.g. Dell, HP etc.) that enable buyers to customize the computer that they want to buy online, generally start with a base-model computer configuration and then append the price of each additional option that the customer adds to the base model. New home salespersons too start off by first discussing the price of a home with base-level amenities, and then append the price of each extra amenity chosen, to the price of

the base model home. On the other hand, model homes that are on display generally are fully-loaded and are used to entice new-home buyers into buying a home with more amenities in them. Hence, we believe that option framing has become fairly ubiquitous, and hence it is important to understand that effects of option framing on consumer choices.

The main focus of this research is studying the combined influence of option framing effects and regulatory focus on the number of options chosen and other key dependent measures. Do prevention-oriented consumers, who are presented a fully-loaded model (base model) and then asked to delete (add) options that they don't want (want), select more (fewer) number of options than do promotion-oriented consumers in the same situations? If so, does one group take more time than the other, to arrive at their final choice decision? Do both these groups of consumers perceive the same amount of value in their final products? This research is aimed at answering such research questions. We start of by distinguishing option framing from other types of framing.

12.5.1 Valence Framing Types

Levin, Schneider and Gaeth (1998) have classified framing effects as Risky Choice Framing, Attribute Framing and Goal Framing.

Risky choice framing descends directly from Prospect Theory (Kahneman and Tversky 1979). In Risky-Choice framing, researchers aim to study people's choice between risky options (e.g. there is a particular level of probability that all will be saved, while a different level of probability that no one will be saved) versus a sure-thing option (e.g. a 100% probability that specific proportion of people will be saved for sure) in positive frame. In the negative frame, researchers offer participants a choice between risky option (e.g. there is a particular level of probability that that no one will die, while a

different level of probability that all will die) versus a sure-thing option (e.g. a 100%

change that a specific proportion of people will die for sure). The two choices in the

positive frame and in the negative frame are mirror images of each other. A fundamental

finding of Risky-Choice framing is that people tend to opt for the sure-thing option in the

positive frame, but opt for the risky choice when presented in a negative frame.

In studying attribute framing, researchers attempt to understand the differences in

people's evaluation of a product when it is presented in a positive frame (e.g. 75% lean)

versus in a negative frame (e.g. 25% fatty). A fundamental finding of this type of framing

has been that people tend to provide higher evaluations when the product is presented

in the positive frame, versus in the negative frame.

With Goal framing effects, researchers attempt to understand the level of persuasion

that is triggered by a message in a positive frame (e.g. attain a gain; evade a loss) vis-à-

vis the level of persuasion that is triggered by a message in a negative frame (e.g.

forego a gain; incur a loss). Again, the choices in the positive and negative are mirror

images of each other.

Biswas and Grau (2008) argue that option framing, which is the focus of the current

research, be classified as a type of goal-framing. In option framing, the additive-option-

frame condition where consumers add options to a stripped-down base model (that is, a

product with bare-minimal options in it) and the subtractive-option-frame condition where

consumers exclude options from a fully-loaded model may be considered mutual

reflections of each other. Hence these two conditions are viewed as two distinct frames.

Park, Jun and MacGinnis (2000) refer to the condition where options are added to the

base model as additive-option frame (+OF), and to the condition where options are

excluded from the fully-loaded model as subtractive-option frame (-OF). Levin, Schreiber, Lauriola and Gaeth (2002) refer to additive framing as "screening in" or as "Build Up" condition. They refer to subtractive framing as "screening out" or as "Scale Down" condition.

12.6 Additive and Subtractive Option Framing

Park, Jun and MacInnis (2000) and Biswas and Grau (2008) argue that consumers, who are presented a product under subtractive-option frame are more likely to choose a higher number of overall options and to end up with a higher-priced final product, then will consumers, who are presented a product package under additive-option frame. The differences in reference point changes and loss aversion have been offered as an explanation for this phenomenon. Relying on Prospect Theory (Kahneman and Tversky 1979), these authors explain this result by proposing that in the case of subtractive frame (i.e. where consumers delete options from a fully-loaded product), consumers anchor at the fully-loaded model as their point of reference. Conversely, in the additive frame (that is, where consumers add options to a base-product), consumers anchor at the base-model as their point of reference.

Given such differences in the reference points, participants in different option-frame conditions (i.e. subtractive versus additive) are said to harbor different levels of loss aversion in both the loss of benefits incurred in deleting options from their product and the loss of money involved in paying for the option. Because consumers in the subtractive-frame condition anchor at the fully-loaded model, they are said to experience endowment effect in the context of the various options that are preloaded in the fully-loaded model. Hence, such consumers will endure higher levels of loss for each option that they delete from the fully-loaded model. In contrast, because consumers in the

additive-frame condition anchor at the base model, they do not experience any endowment effect.

Based on the principles of loss aversion, consumers, in the subtractive frame, are more likely to be sensitive to the loss of options, rather than to monetary gain incurred in deleting options (Park et al. 2000). Hardie, Johnson and Fader (1993) have shown that loss aversion experienced for product options is stronger than the loss aversion experienced in paying for retaining those options (for which endowment effect is experienced in subtractive frame). Hence, one can infer that consumers in the subtractive frame are relatively more averse to deleting options from the fully-loaded product. Essentially, under the subtractive frame, the tendency to avert losses causes consumers to focus on avoiding utility loss, if the number of options is reduced. Consequently, consumers, in the subtractive-frame condition, end up retaining most options, which existed in the fully-loaded product, in their final product.

In contrast, consumers in the additive frame are more likely to be sensitive to monetary loss incurred in paying for an option, rather than to the utility gain incurred by having that option (Park et al. 2000). Consumers in the additive frame do not feel endowed with any option features, and hence do not experience subsequent loss aversion for such options. Hence, such consumers may be relatively more objective in deciding whether the incremental utility that each added option provides is worth the money that they will need to pay for it. Essentially, under the additive frame, the tendency to avert losses causes consumers to focus mainly on avoiding monetary loss involved, if options are added. Consequently, consumers, in the additive-frame, end up adding only those options, which they find worth paying for, to the base product. The net outcome is that the

number of options finally chosen by consumers in additive frame is lower than the number of options chosen by consumers in the subtractive frame.

Park et al. (2000) and Biswas & Grau (2008) forward yet another explanation for this effect. They propose that the cause for this difference is that people under the additive frame, versus people in the subtractive frame, harbor different levels of sensitivity to the price of each option. Biswas and Grau refer to this explanation as the price-differential explanation. Consider a situation where a fully-loaded model of a hypothetical product costs $5000, while its base model costs $3500. An option that is priced at $350 costs 7% in the context of the price of fully-loaded model, while costing 10% in the context of the base model. Given that consumers, who are presented the product in the subtractive-frame condition, anchor at the fully-loaded price of $5000, and thereby become relatively less sensitive to the price of the option which is priced at 7% of their reference price. In contrast, consumers, who are presented the product in the additive-frame condition, anchor at the base model price of $3500, and thereby become more sensitive to the price of this same option, which now is priced at 10% of their reference price.

12.7 Interaction Between Option Framing And Regulatory Focus

We now extend the findings of Park et al. into the domain of regulatory focus. As suggested earlier, under the subtractive frame, the tendency to avert losses causes consumers to focus on the product-benefits loss if the number of options in the fully-loaded product is reduced. In contrast, under the additive frame, the tendency to avert losses causes consumers to focus mainly on the monetary loss involved if more options are added. However, the Compounded-Differential-Utility Framework suggests that prevention-oriented consumers have a higher inherent tendency to be more loss averse

than are promotion-oriented consumers. Hence, their higher tendency for loss aversion should lead prevention-oriented consumers under subtractive frame, to heuristically retain a relatively higher number of options (and thereby actualize reduced product utility loss) than will be done by promotion-oriented consumers under subtractive frame. Likewise, their higher tendency for loss aversion will also lead prevention-oriented consumers under additive frame, to heuristically add fewer options (and thereby actualize a reduced monetary loss) than will be done by promotion-oriented consumers under additive frame.

Based on the compounded-differential-utility framework, we infer that under subtractive-option framing scenario, prevention-oriented consumers, versus promotion-oriented consumers, are more likely to be sensitive to the repeated reduction in utility caused by the deletion of options from the fully-loaded model. Hence, managers, who present a product in subtractive-option frame to prevention-oriented consumers, versus promotion-oriented consumers, are more likely to be successful at making a bigger overall sale through a higher final-product price. In this situation, prevention-oriented consumers are more likely to retain a higher number of overall product options then will promotion-oriented consumers.

Conversely, under the additive-option framing scenario, promotion-oriented consumers, versus prevention-oriented consumers, are more likely to be sensitive to the repeated increase in product utility that is caused by addition of options to the base model. Hence, managers, who present a product in additive-option frame to promotion-oriented consumers, versus to prevention-oriented consumers, are more likely to be successful at making a bigger overall sale through a higher final-product price. In this situation,

promotion-oriented consumers are more likely to add a higher number of overall product options then will prevention-oriented consumers.

Further, prior literature suggests that promotion-oriented people tend to avoid errors of omission (Higgins and Spiegel 2004). This suggests that promotion-oriented people will tend to deviate more from the number of options that are offered in the original product presented. Hence, when presented with a base (fully-loaded) model, promotion-oriented people will tend to add (remove) more options per se. In contrast, prevention-oriented participants focus on avoiding errors of commission. Prevention-oriented will tend to stay closer to the original number of options that are offered in the original product presented. Conversely, when presented with a base (fully-loaded) model, prevention-oriented people will tend to add (remove) fewer options.

Prior research also suggests that prevention-oriented participants have a stronger preference for default option, as compared to promotion-oriented people (Chernev 2004). In the subtractive (additive) frame, the fully-loaded (base) product may be viewed as the default. A preference for default option suggests that prevention-oriented people will add fewer options in the case of additive frame (and stay as close as possible to the base model), and retain more options in the case of subtractive frame (and stay as close as possible to the fully-loaded model). In contrast, given their lack of preference for the default option, promotion-oriented people will tend to deviate from the default option, and hence will add relatively more options in the additive frame, and retain relatively fewer options in the subtractive frame.

Hence, the hypothesis:

H2: When presented with a task of adding (deleting) options to (from) a base model (fully-loaded model), promotion (prevention)-oriented consumers, versus prevention (promotion)-oriented consumers, are more likely to add (retain) more options and end up with a higher-priced final product.

This hypothesis is aligned with Park et al.'s hypothesis that participants presented with option framing will have wider differences in the number of options chosen when asked to anticipate regret, as opposed to when not asked to anticipate regret. However, there are key differences between the regret manipulation undertaken by Park et al. and the regulatory-focus manipulation that we undertake. Park et al. manipulated regret by informing their participants to assume that the manufacturer does not allow option choices to be changed following purchase. This manipulation led all of Park et al.'s participants to focus entirely on the course of action. As has been laid out earlier, the course of action was for participants to avert losses in product benefits when under subtractive frame, and to avert monetary losses when under additive frame.

In regret, the chosen course of action (or inaction) is said to be compared with what could have been (Zeelenberg et al. 1998). In the context of regulatory focus theory, promotion-focus manipulation causes participants to compare the course of action and what could have been, and thereby undertake the most expansive course of action. Likewise, prevention-focus manipulation causes participants to compare the course of inaction with what could have been, and thereby undertake the most conservative means of inaction. Promotion-oriented consumers are inherently hardwired to guard against post-decisional regret in relation to errors of omission, while prevention-oriented consumers tend to guard against post-decisional regret in relation to errors of commission (Pham and Higgins 2005). By placing both promotion and prevention-

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oriented consumers, under both additive and preventive option frames, we believe that we may have achieved a cleaner implementation of the overall regret manipulation effect.

Additionally, there are differences between the focus of this paper, and Park et al's (2000) work. Firstly, the current paper focuses on how regulatory focus differences interact with option framing to influence multiple dependent variables such as the number of options selected, final product price, reference price, time taken to make decision and decision difficulty, value perceived in options chosen and purchase commitment. Part et al. focus chiefly on option framing main effects on various dependent measures. Additionally, Park et al., in contrast, focus mainly on how the interaction between regret anticipation manipulation and option framing influences two specific dependent measures, namely, number of options chosen and final product price. Finally, Park et al. actually manipulate regret, while we rely on median splitting participants' chronic regulatory-focus scores.

12.8 Perceived Reference Price

In the context of this paper, we denote reference price to mean an estimate of the consumer's final product price. We argue that if the consumer retains fair levels of information-processing resources, then her reference price for the final product should be fairly close to the actual final price of the product.

Given that prevention-oriented consumers, under subtractive frame, retain higher number of options in their final product choice, we expect them to infer a relatively higher reference price than will promotion-oriented consumers under subtractive frame. This is so as, in the subtractive frame, given that prevention-oriented consumers retain more

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options, they will tend to shift relatively less downwards from the price of the fully-loaded model, in establishing their reference price for their final choice, in comparison to promotion-oriented consumers.

On similar lines, under additive frame, given that promotion-oriented consumer add higher number of options in their final product choice and hence shift relatively more upwards above the price of the base model, we expect them to infer a relatively higher reference price than will prevention-oriented consumers.

Hence, the hypothesis:

H3: In additive (subtractive) frame, promotion (prevention)-oriented consumers will have a higher reference price for the final product, than will prevention (promotion)-oriented consumers.

12.9 Decision Time & Decision Difficulty

Decision Time & Decision Difficulty

We now turn to the issue of how much time consumers spend in finalizing the number options that they add (when presented with additive-option framing condition) or the number of options that they retain (when presented with subtractive-option framing condition).

Park, Iyer and Smith (1989) argue that when consumers are not under time pressure at a retail store, they will undertake increased deliberations on purchase volume. Though consumers will have carried out prior deliberations on the volume of purchase to be undertaken, the bulk of final deliberations on the purchase volume are presumed to be undertaken right at the store. By reversing this line of reasoning, we argue that if a

consumer spends more time in making purchase volume deliberations, then, one may infer that she may be undertaking increased levels of purchase-volume deliberations. In the context of this research, we propose that if a consumer spends more time in deciding how many options to add or to retain, then it may be a result of the increased levels of deliberations undertaken as a result of increased difficulty in this decision-making. And, this increased amount of time required for purchase-volume deliberation, may be a result of the conflict involved in finalizing which and how many options to add or to retain.

Park, Jun and MacInnis (2000) suggest that, consumers specifically subjected to subtractive framing (in comparison to those subjected to additive frame), face increased amounts of difficulty in decision making, thereby leading to higher levels of deliberations and increased time in finalizing choice. Further, as has been discussed earlier, prevention-oriented consumers, versus promotion-oriented consumers, are more sensitive to the loss in utility incurred due to deletion of each option in subtractive framing.

Hypotheses H2 states that in the subtractive frame, promotion-oriented consumers tend to delete more options from the fully-loaded model, in comparison to the prevention-oriented consumers. We make the reasonable assumption that the more the options that consumer has to delete from the fully-loaded model, the more the time will be required. Further, given the potential for a conflict on which options to delete, the more options that a consumer decides to delete, the more difficult will the task be perceived. Given this, in the subtractive frame, promotion-oriented consumers should require relatively more time and perceive more decision difficulty, than will prevention-oriented consumers, in finalizing their choice of options.

In contrast, in the additive frame, promotion-oriented consumers tend to add more options to the base-model. Hence, in the additive frame, promotion-oriented consumers should require relatively more time and perceive more decision difficulty, than will prevention-oriented consumers, in finalizing their choice of options.

Being in the additive frame, should lead consumers to experience a clash between utility gain and monetary loss, while subtractive frame leads consumers to experience a clash between utility loss and monetary gain (Park et al. 2000). In such a context, consumers are expected to be more sensitive to utility loss than they are to monetary loss (Hardie , Johnson and Fader 1993). As such, consumers should experience more conflict and hence higher level of difficulty, when making choices under subtractive frame, than under additive frame (Park et al. 2000). On similar lines, hiring managers find rejecting qualified job candidates to be more difficult than hiring them (Huber, Neale and Northcraft 1987). Additionally, because people inherently conceptualize decision-making as choosing rather than as rejecting (Shafir 1993), rejecting options (as is done in subtractive frame) is expected to be more difficult than adding options (as is done in additive frame).

Given this, we propose that the differences in time taken and difficulty perceived between promotion and prevention-oriented people, will be necessarily statistically significant in the case of subtractive frame. If rejecting options is hard, then rejecting a larger number of options (as is done by promotion-oriented consumers) is bound to be much harder than is rejecting fewer options (as is done by prevention-oriented consumers). However, we don't expect that differences in the difficulty and time differences to be significant in the case of additive frame. Given that adding options is not that difficult a task, adding more options (as is done by promotion-oriented

consumers) is not expected to be that much harder than adding fewer options (as is done by prevention-oriented consumers). Hence the hypotheses:

H4: In subtractive frame, promotion-oriented consumers will take significantly more time in finalizing the option choices, than will prevention-oriented consumers

H5: In subtractive frame, promotion-oriented consumers will perceive significantly higher level of difficulty in finalizing the option choices, than will prevention-oriented consumers

12.10 Perceived Value

In this context of this paper, value is assumed to explicate how the benefits provided by the options chosen in the final product compare to what was paid for those options. We anticipate that since the subtractive frame stimulates prevention-oriented consumers to choose relatively more options, they should perceive relatively more benefits in their final product, in relation to promotion-oriented consumers. However, in evaluating the value perceived in the options chosen, the question that arises is whether consumers use the price of fully-loaded model in subtractive frame and the price of the base model in the additive frame, to assess the price standard of assessment of the value in the product. Or, do the customers consciously or preconsciously estimate the final price of the product and use this estimate (that is, reference price) as the price standard of assessment of the value perceived in the product? Further, it is entirely plausible that participants rely on one of these standards for evaluating value under one condition of option frame and regulatory focus, while relying on some other standard when under other conditions.

If one assumes that both prevention and promotion oriented consumer use the price of the fully-loaded product under subtractive frame, then both prevention and promotion

oriented consumers will be using the same price standard for evaluation the value in the final product. However, given that prevention-oriented consumers retain more options than do promotion-oriented consumers, and given that price standard for assessing value is the same for both these consumer groups, we argue that prevention-oriented consumers should perceive higher value than promotion-oriented participants, under subtractive framing.

Exactly reverse will be the situation in the additive frame. In the additive frame, promotion oriented consumers add more options than are added by prevention oriented consumers. However, given the assumption that under the additive frame, consumers utilize the price of the base model to assess perceived value, we can conclude that promotion-oriented consumers should perceive higher value in than prevention-oriented consumers.

Hence we present the hypothesis:

H6: In the additive (subtractive) frame, promotion (prevention)-oriented consumers will perceive higher value in their final option choice than will be perceived by prevention (promotion)-oriented consumers.

In contrast to this, if it is presumed that consumers utilize their reference price (that is, their estimate of the final product price given the number of options that they had chosen as their price standard of assessing value, then the inference suggested in the prior paragraph, will not hold. Based on the hypotheses H3 and H2, we know that in the additive frame, promotion-oriented consumers will have a higher reference price and will choose more options in the final product, in relation to prevention-oriented consumers. If consumers utilize their reference price then, in the additive frame, the higher number of

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options that promotion-oriented consumers choose will adjust for their relatively higher reference price. Likewise, the lower number of options that prevention-oriented consumers choose will adjust for their lower reference price. As such, there may not be any significant difference between the perceived value of options chosen by prevention and promotion-oriented consumers, under the additive frame. We would expect a similar outcome of the subtractive frame.

Hence, we present the hypothesis:

$H6_{alternate1}$: In additive and subtractive frames, promotion-oriented consumers and prevention-oriented consumers will perceive relatively equal value in their final choice of options.

It is important to note however that there may still be another perspective that might be presented when it comes to how consumers will perceive value. In this perspective, the logic presented in hypothesis $H6_{alternate1}$ for the additive frame may not hold in the subtractive frame. Recall that under the subtractive frame, the tendency to avert losses causes consumers to focus on avoiding utility loss. As we have discussed earlier, prevention-oriented consumers are especially sensitive to losses that they are focused on avoiding, and are extremely proactive in averting losses. Since prevention-oriented participants become very averse to the losses in benefits, they may tend to almost-heuristically retain most options in the fully-loaded product, including the ones that they may not benefit much from. This will end up raising the final product price and the reference price for the product for prevention-oriented consumers. Hence, we believe that prevention-oriented consumers in the subtractive frame may tend to retain even those options that they may not benefit from and yet will end up with a relatively high final product price.

As against this, promotion-oriented participants are less keen on avoiding losses and may not fall prey to this tendency. As pointed out in Hypothesis H4, promotion-oriented consumers will also spend more time than prevention-oriented consumers in deciding which options to retain and will go through a more stringent (that is, systematic) decision-making process in which options to retain. As such, we expect that promotion oriented consumers in subtractive frame to retain only those options that they need, and yet pay a relatively lower final product price. Hence, in the subtractive frame, promotion-oriented participants will perceive higher value in the options chosen and in the final product than will be perceived by prevention-oriented consumers.

We not expect the reverse of this prediction, in the additive frame. Loss-sensitive prevention-oriented consumers tend to naturally choose the fewest options under additive frame.

Hence, we present the hypothesis:

$H6_{alternate2}$: In the subtractive frame, promotion-oriented consumers will perceive higher value in their final choice of options than will be perceived by prevention-oriented consumers. In additive frame, promotion-oriented consumers and prevention-oriented consumers will perceive relatively equal value in their final choice of options.

12.11 Mediation Relationship

As has been discussed earlier, given that consumers retain more options in subtractive frame than are added in additive frame, reference price of the product will be perceived to be higher under subtractive versus in additive frame. However, consumers are said to

focus on prices when product purchase commitment is low, but not when category commitment is high (Monroe 2003). Based on this, Park et al. argue that the influence of option framing on the number of options chosen should fade away if consumers harbor a high product category commitment.

Park et al. study product category commitment by manipulating it and checking its influence specifically on the number of options selected. In contrast to Park et al., we take a slightly different approach to studying the effect of option framing on commitment. We study product purchase commitment as a dependent variable. We examine the changes in promotion-or-prevention-oriented consumer's purchase commitment for a product that is presented in subtractive or additive option frame. We argue that the interaction of regulatory focus and option framing itself can lead to changes in product purchase commitment.

Much prior research in retailing has shown that value perceived in the product is the antecedent of purchase-commitment intentions (Zeithaml 1988). Higher value perceptions (considering the product utility and product quality in relation to its price) is said to lead to higher purchase commitment (in the form of increased purchase intentions and purchase likelihood and reduced intentions to search at alternative stores or search for alternative products). For example, Grewal, Monroe and Krishnan (1998) find that higher acquisition value and transaction utility, perceived in a product, leads to increased willingness to buy the product and reduced search intentions at other stores. Dodds, Monroe and Grewal (1991) find that perceived value lead to increased willingness to buy from the store. On similar lines, Grewal, Krishnan, Baker and Borin (1998) find that increase in perceived value lead to increased purchase intentions at the store.

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In the prior section, we hypothesized that the interaction between regulatory focus and option framing may influence the value perceived by consumers in options chosen and thereby in the product. Further, as discussed in the prior paragraph, value perceptions are the primary drivers of purchase commitment. Hence, we argue that perceived value mediates the relationship between regulatory-focus-and-option-frame interaction and purchase commitment.

Hence, the hypothesis:

$H7_{alternate1}$: Perceived value mediates the linear relationship between purchase commitment and the interaction between regulatory focus and option framing.

We will conduct two two-way ANOVA/ANCOVA analyses with regulatory focus and option frame as the factors. The first will have perceived value as the dependent variable and the second will purchase commitment as dependent variable. If the main effect of option frame on value perceptions and on purchase commitment is not significant, while the main effect of regulatory focus on value perceptions and purchase commitment is significant, we can infer that option frame may not be entering this mediation relationship (assuming that mediation tests show that perceived value significantly mediates the relationship between regulatory focus and purchase commitment, and that the interaction between regulatory focus and option framing is not significant). If this condition holds, then we specify the following hypothesis:

$H7_{alternate2}$: Perceived value mediates the linear relationship between purchase commitment and regulatory focus.

In contrast, if the main effect of regulatory focus on value perceptions and on purchase commitment is not significant, while the main effect of option on value perceptions and purchase commitment is significant, we can infer that regulatory focus may not be entering this mediation relationship (assuming that mediation tests show that perceived value significantly mediates the relationship between option frame and purchase commitment, and that the interaction between regulatory focus and option framing is not significant). If this condition holds, then we specify the following hypothesis:

H7$_{alternate3}$: Perceived value mediates the linear relationship between purchase commitment and option framing.

Given that option frame scenario has to be manipulated and hence cannot be measured on a continuous scale, we will rely on conducting a series of ANOVA and ANCOVA analyses to test which one of these three mediation hypothesis holds.

12.12 Modeling Influence Of Time Taken On Number Of Items Chosen

Much prior research suggests that the amount of time that consumers spend in a retail store positively influences their purchase volume. The Mehrabian-Russell model has been applied to the context of store environment in terms of how it affects consumer behavior, the amount of time they spend at the store and the number of items they buy (Donovan and Rossiter 1982). This model states that pleasure and arousal mediate consumers' behavioral approach-avoidance responses to their environment. In a retail situation, these two variables have been proposed to be antecedents of the amount of time taken by participants and the number of items purchased. Research in retailing has found support for this model. For example, Tsai and Huang (2002) find that customers' in-store positive mood positively influences the amount of time that consumers spend in a store. On similar lines, Sherman, Mathur and Belk (1997) find that store arousal

positively influences the amount of time that consumers spend in the store and the number of items that they buy. Donovan, Rossiter, Marcoolyn and Nesdale (1994) too find that pleasure and arousal experienced in a store lead to extra time spent in a store and to unplanned purchase.

Extending these findings to the context of this research, we assume that task enjoyment (that is, pleasure) and value perceived in the options chosen (that is, arousal) are predictors of the amount of time that participants spend in their decision-making and of the number of options they chose.

Further, as has been discussed earlier, decision difficulty predicts the amount of taken to make the decision choice. We also conjecture that purchase commitment may influence the number of options chosen as well. Consumers who have a high purchase commitment for a product may have pre-decided the number of options that they are going to add/retain to/in the product (Park et al. 2000). Further, we argue that the purchase commitment that consumers harbor can also affect the amount of time that they spend in their finalizing their options. On one hand, committed consumers can be assumed to spend more time in finalizing the options they want to have in their product, given that they are serious about actually buying the product. On the other hand, committed consumers may actually spend relatively less time in finalizing which options to choose, as committed consumers are assumed to have already made that decision in advance (Park et al. 2000). Given this, the models for the amount of time spent in arriving at the option choice decision, and the number of items chosen are:

Time_Taken $= B_{10} + B_{11}.\text{task\_enjoyment} + B_{12}.\text{perceived\_value} + B_{13}.\text{purchase\_commitment} + B_{14}.\text{decision\_difficulty} + e_1$ _____(1)

Num_Options = B_{20} + B_{21}.task_enjoyment + B_{22}.perceived_value +

B_{23}.purchase_commitment + e_2 _____(2)

Further, prior research has shown that the amount of time that participants spend in a store itself influences the volume of purchase (Park, Iyer and Smith 1989). Tsai and Huang find that the more time consumers spend inside a store, the more items they tend to purchase, given the more product information they gather. Given this evidence, we augment model (2) by adding time_taken as an endogenous predictor of the number of options chosen. Hence, we can rewrite model (2) as model (3):

Num_Options = B_{20} + B_{21}.task_enjoyment + B_{22}.perceived_value +

B_{23}.purchase_commitment + B_{23}.time_taken   +e_2 _____(3)

Model 1 is a duration model, while model 2 is count model. A FIML (full information maximum likelihood) estimation is not possible in this case given that it is not possible to identify a joint of distributions used in duration and count models   . Hence, we will rely on two-step maximum likelihood estimation, also referred to as LIML (limited information maximum likelihood) estimator. Since we will be relying on a rather-complex two-step maximum likelihood estimation method, we prefer to select the simplest possible individual models for the duration and for the count dependent variables. Hence, we selected the exponential model for duration and the poisson model for count. We will run an exponential regression for the time duration required for participants to finalize their options in model 1. Further, we will run a poisson regression for the number of options chosen, in model 2.

Given that time_taken is endogenous in the context of this system of equations, the predictions for time_taken from model 1 are appended to the predictors in model 3, as is done in two-step estimation. The Murphy and Topel (1985) method involves programming efforts to correct the variance covariance matrix of the coefficients of model 3. Details of how the correction was programmed are provided in Appendix A.

In the next section, we present details of Study 1. Study 1 was designed to explore support for the general hypotheses H1A and H1B.

CHAPTER 13

STUDY 1

We tested the validity of hypotheses H1A and H1B with145 undergraduate marketing students at a business school at a public university in the south.

13.1 Procedure

Participants were determined to be promotion or prevention oriented based on a median split of their scores on 18 items of the chronic regulatory focus scale (Lockwood, Jordan and Kunda 2002).

13.2 Method

We presented the students with two scenarios and asked them to provide inputs on which frame they preferred.

Scenario 1

Mr. A was given 3 tickets to lotteries involving the World Series. He won $500 in the first lottery and then $250 in the second, and then $1000 in the third. Mr. B was given a ticket to a single, larger World Series lottery. He won $1750.

Who is happier? Mr. A or Mr. B.

A cross tabulation analysis shows that of 72 promotion-oriented participants, 51 indicated that A is happier, while 21 indicated that B is happier. Among 73 prevention-oriented participants, 39 indicated that A is happier, while 34 indicated that B is happier. The Pearson chi-square is significant ($p < 0.05$).

Scenario 2

Products C and D, are two comparable products, and both were initially priced at $1,450. Product D's price increased by $100 two weeks ago, by another $90 a week ago, and finally increased further by $60 yesterday. Product C's price increased to $1,700 a few days ago. Which product do you consider more appealing? Product C or Product D?

The analysis showed that all 72 promotion-oriented participants and all 73 prevention-oriented participants indicated that product C was more appealing. Anticipating such an outcome, we further asked the participants to respond to the follow-up question "What is the difference between the appeals of product C and product D?", anchored at 1 (Not much difference) and 7 (a lot of difference). A between-group T test on this interval measure showed that the prevention-oriented participants found a marginally larger difference in the appeal between C and D, in comparison to prevention-oriented participants (M's 4.08 vs. 3.48, p = 0.09).

Based on this, we infer that we have preliminary support for hypotheses H1A and H1B. Next, we describe study 2, the main focus of this research. Study 2 was designed to explore support for hypotheses H2 through H7.

CHAPTER 14

STUDY 2

For study 2, we undertook a 2 (additive versus subtractive option framing) X 2 (promotion versus prevention orientation) design.

14.1 Participants & Stimulus

A total of 174 undergraduate students from a major university in the south participated in the study. Based on prior work by Park et al. (2000), we decided to use automobile as the stimulus for the first study. The feature options that are available in cars are understood by most people, and consumer aspects of cars are pretty well understood by the population in general. Keeping in line with Park et al., and to reduce the influence of brand on the results, we referred to the stimulus car brand as the ABC car.

A set of 12 product options, which are most-commonly chosen from when buying a new car, were selected as the feature options in this study. The included options were air-conditioning, power steering, power windows, power door locks, tilt wheel, cruise control, audio package, back-up sensor, GPS, six cylinder engine, premium trim and sunroof. Options were priced ranging from $450 to $1200. The options and their prices were gathered from www.edmunds.com and www.honda.com so as to impart external validity.

14.2 Procedure

The study was conducted using Metacard software, which had the stimulus, options and other details preprogrammed in advance. Participants worked with the software in an

interactive manner, such that the software presented the participants with information about the stimulus and other details, and then asked the participants to make choices on the number of options that they would like to either add or retain, depending on the condition. After that participants responded to several items that were dependent measures, demographics questions etc. The authors worked with participants in groups that ranged from 2 to 14 people in size.

Participants were informed that they should consider themselves to be in a car-buying situation. Participants in the additive frame were informed that the price of the base model of the ABC car is $17,555 and that they have to decide which of the 12 options they would like to add into the car. On the next screen, the software displayed each of the 12 options and their individual price. Participants could select as many of these 12 options as they wanted, by clicking a check box next to the option. The final price of the ABC car of the participant was calculated (but not displayed to participants) by adding the total price of all the options chosen to the base price of $17,555.

In contrast, participants in the subtractive frame were informed that the price of the fully-loaded model of the ABC car is $25,909 and that they have to decide which of the 12 options they would like to retain, as their final choice. The price of all the 12 options put together was $8,354, which is the difference between the price of the fully loaded model ($25,909) and the base-model ($17,555). On the next screen, the software displayed each of the 12 options and their price. In this condition, the 12 options were pre-selected (i.e. the check box next to the option was in a pre-checked condition, for all the 12 options). Participants could delete as many of these 12 options as they wanted, by unchecking the check box next to the option. The final price of the ABC car of the participant was calculated (but not displayed to participants) by subtracting the total price

of all the deleted options from the fully-loaded model price of $25,909. A screenshot of the option-deselection screen is displayed in figure 1.
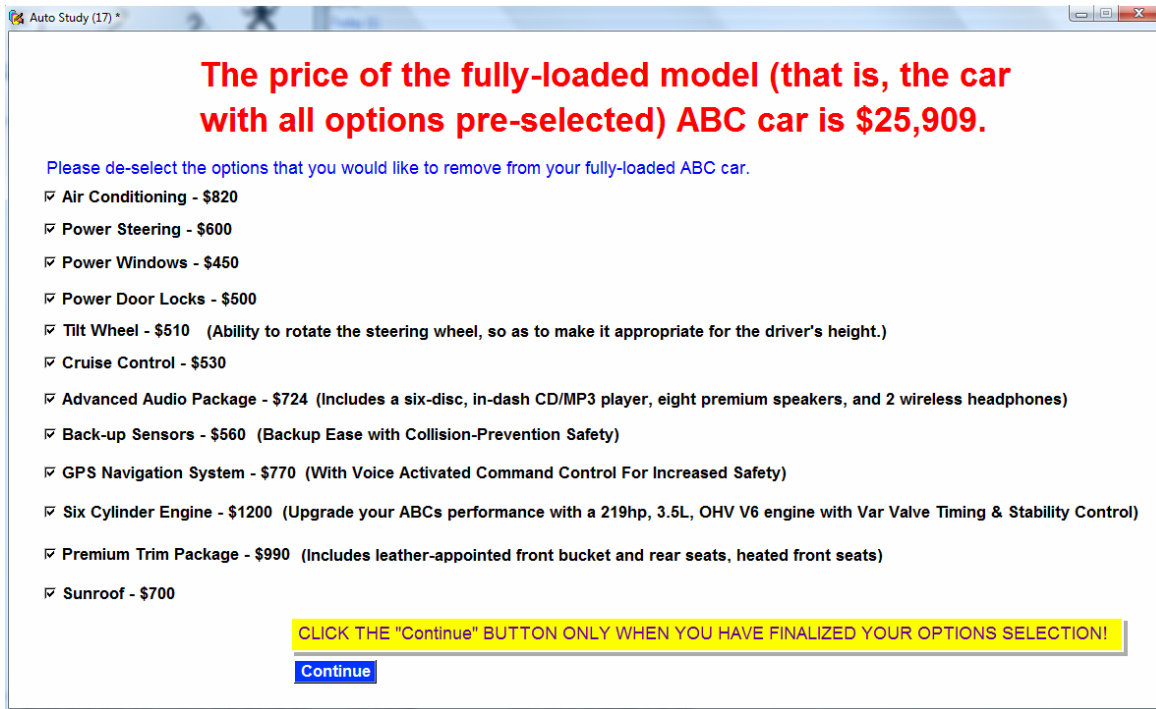
Figure 1
Options-Deselection Screen

Given that this study was intended to study effects of regulatory focus on choice, it was important to ensure that the options available were evenly spread between hedonic (promotion concerns) and utilitarian (prevention concerns) features. We made an attempt to strike a balance in the types of options that we used in the study. A brief pretest with 6 participants suggested that the first 6 options (namely, air conditioning, power steering, power windows, power door locks, tilt wheel and cruise control) were perceived as more utilitarian options. In contrast, the second 6 options (namely,

advanced audio, backup sensors, GPS, six-cylinder motor, premium trim and sunroof)

were perceived to be more hedonic options.

Finally, participants responded to the 18-item chronic regulatory focus scale by

Lockwood, Jordan and Kunda (2002). Participants were classified as promotion or

prevention oriented by median splitting them based on their score on this scale.

14.3 Dependent Measures

Number of Options & Final Price

The software program calculated the final car price and maintained a tally of the number

of options that each participant had added or retained in his/her final choice.

Reference Price

The reference price for the car with the final choice of options was captured by eliciting

response to the item, "Given the options that you selected, roughly how much do you

expect to pay for your ABC car?" which was adapted from Park et al. (p.192).

Decision Time

The software program calculated the amount of time (to the accuracy of millisecond) that

each participant spent on the screen where participants finalized their choice of the

number of options they'd like to have in their ABC car. We found that 12 participants had

spent fewer than 15 seconds on this screen. We made the supposition that these 12

participants lacked motivation, and hence spent so little time on this critical screen

because they were not serious about participation in this study. As such these

participants were deleted from the data, reducing our final sample size to 162.

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Decision Difficulty

Two Decision difficulty items were created by adapting the items in Park et al. The first item was "Overall, it was easy for me to make the option-choice decisions for my ABC car" (reverse coded) and the second was "Given this situation, I believe that most people will have to think very hard, in finalizing their choice of options, for the ABC car" on a 1 (strongly disagree) to 7 (strongly agree) scale. The two items were summed to form a composite scale.

Perceived Value

Participants' perception on value in their final product (which is inclusive of the value in their final choice of options) was measured using four items. The items "The option choices that I finalized, represent .... " on a 1(very little value) to 7 (a lot of value) and "The options that I chose for my car, represent a poor choice." (reverse coded) on a 1(strongly disagree) to 7 (strongly agree) scale, were adaptations of the items used by Park et al. We added two more items, namely, "It was important for me to settle only on meaningful options in the car" and "Overall, I am very satisfied with my final car, specifically in terms of choice of options" on a 1(strongly disagree) to 7(strongly disagree) scale. The four items were summed to form a composite scale.

Purchase Commitment

Participants' purchase commitment was measured using four items. The first two items were based on the likelihood of purchasing the ABC car and on the extent of information search on other brands, before committing to buy the ABC car. These items were adaptations of the items used by as a purchase commitment manipulation checks used by Park et al. The items were worded, "Given the options that I ended up selecting, there is a high probability that I will buy the ABC car" and "Before committing to purchasing the

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ABC car, I am very likely to look for information on other car manufacturers, if this were possible" on a 1 (strongly disagree) to 7 (strongly agree) scale. We added two more items. They were, "I am certain that buying the ABC car, with the options that I settled on, is the correct decision for me" and "I am likely to recommend the ABC car, with the options that I selected, to a close friend" on a 1 (strongly disagree) to 7 (strongly agree) scale. The four items (cronbach alpha = 0.67) were summed to form a composite scale.

Task Enjoyment

On the lines of Park et al., we measured task enjoyment, as an aspect of participants' attitudinal reactions. Three items were used, namely, "I found the task of choosing options for my car, to be enjoyable", "I found the task of choosing options for my car, to be interesting" and "I found the task of choosing options for my car, to be pleasant" on a 1 (Strongly Disagree) to 7 (Strongly Agree) scale. The three items (cronbach alpha = 0.8) were summed to form a composite scale.

Appendix C presents the instrument used in this study.

CHAPTER 15

RESULTS & DISCUSSION

We will first study the results of the ANOVA analysis with the many dependent variables that we have identified. The detailed results for the ANOVA analyses are presented in Table 9.

15.1 Number of Options & Final Price

We first conducted two ANOVA analyses. The first was on the number of options chosen and the second was on final price respectively, as the dependent variables. For the number of options chose, the main effect of option framing is significant F=30.68 (p<.01) but the main effect of regulatory focus is not significant (F = .024; p>0.05). The interaction between option framing and regulatory focus is significant (F = 12.67; p<0.01).

Table 9
ANOVA Results

Dependent Variable	Source	F Value	Additive Frame		Subtractive Frame	
			Promo Focus	Prevent Focus	Promo Focus	Prevent Focus
# of Options Chosen	Regulatory Focus	.025	8.7	7.54	9.38	10.65
	Options Frame	30.64*				
	Interaction	12.67*				
# of Options Chosen (linear ANCOVA)	Regulatory Focus	.096				
	Options Frame	34.76*				
	Interaction	5.47*				
	Task Enjoyment	11.23*				
	Perceived Option Val	6.57*				
	Time Taken	43.37*				
	Purchase Commitment	1.07				
Final Price	Regulatory Focus	.112	23,563.00	22,721.85	23,937.54	24,949.52
	Options Frame	26.39*				
	Interaction	13.35*				
Reference Price	Regulatory Focus	.2	23,371.81	21,736.23	22,172.75	24,427.13
	Options Frame	1.16				
	Interaction	7.9*				
Time Taken(ANOVA)	Regulatory Focus	1.76	45.05	47.22	50.28	40.30
	Options Frame	.082				
	Interaction	4.25*				
Time Take (linear ANCOVA)	Regulatory Focus	.805				
	Options Frame	.204				
	Interaction	3.97*				
	Task Enjoyment	.016				
	Perceived Option Val	.106				
	Purchase Commitment	.663				
	Decision Difficulty	11.23*				
Decision Difficulty	Regulatory Focus	.54	6.58	6.35	6.89	6.54
	Options Frame	.45				
	Interaction	.022				
Perceived Value	Regulatory Focus	5.49*	22.76	22.76	23.38	21.26
	Option Frame	.935				
	Interaction	5.48*				

* indicates that p-value was lower than 0.05;

For final car price, the main effect of option framing is significant F=26.33 (p<.01) but the main effect of regulatory focus is not significant (F = .112; p>0.05). The interaction between option framing and regulatory focus is significant (F = 13.353; p<0.01).

The implication of this finding is that, in contrast to that for prevention-oriented consumers, for promotion-oriented consumers, option-framing may not be influencing the number of options chosen or the final price of the product. Promotion-oriented consumers, given their eagerness to maximize advancement, sway too far from the initial starting options of both the option frames. The net outcome is a neutralization of the effects of additive and subtractive frame effects when it comes to promotion-oriented consumers.

Going beyond the main and interaction effects on the number of options chosen, it is important to check the influence of covariates (specifically, task enjoyment, perceived options value, purchase commitment and time taken, based on the theorization forwarded when presenting model 2) in the presence of the factors, namely, regulatory focus and options frame. Hence, we conducted a linear ANCOVA analysis with the specified covariates, on the number of options chosen as the dependent variable. Later, we will compare the results of this linear ANCOVA on the number of options chosen, with the results of the non-linear ANCOVA based on model 3.

As shown in Table 9, in addition to the interaction term (which the ANOVA had shown to be significant), the linear ANCOVA results show that the covariates task enjoyment, perceived options value and time taken are significant predictors of the number of

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options chosen. Managers should find this result pertinent. Based on this result, we can infer a managerial implication that despite the presence of option framing, which managers can control, other variables (such as task enjoyment, perceived value in options chosen and the amount of time needed to make the option choice decision) are also relevant in influencing the number of options chosen by consumers. Managers may be able to control these other variables as well, in order to positively influence the number of options chosen by consumers.

15.2 Reference Price

For the reference price, the main effect of option framing is not significant ($F=1.61$; $p=.28$) and the main effect of regulatory focus is not significant ($F = .2$; $p=0.65$). The interaction between option framing and regulatory focus is significant ($F = 7.89$; $p<0.01$).

15.3 Time Taken

For the amount of time taken to make the decision, the main effect of option framing is not significant ($F=0.08$; $p=.775$) and the main effect of regulatory focus is not significant ($F = 1.76$; $p=0.18$). The interaction between option framing and regulatory focus is significant ($F = 4.25$; $p<0.05$).

In line with hypothesis H4, we find that when the task was presented in a subtractive frame, promotion-oriented participants took significantly more time than did prevention-oriented participants (M's 50.28 vs. 40.30, $F = 5.81$, $p<.05$). In contrast to that, but as was expected in the additive frame, promotion-oriented participant took almost the same time as did prevention-oriented participants (M's 45.05 vs. 47.22, $F = .27$, $p = 0.6$).

Going beyond main and interaction effects on time taken, it is important to check the influence of covariates (specifically, task enjoyment, perceived options value, purchase

commitment and decision difficulty, based on the theorization forwarded when presenting model 1) in the presence of the factors regulatory focus and options frame. Hence, we conducted a linear ANCOVA analysis with the specified covariates, on time taken as a dependent variable. Later, we will compare the results of this linear ANCOVA on the amount of time taken, with the results of the non-linear ANCOVA based on model 2.

As has been shown in Table 10, in addition to the interaction effect (which the ANOVA had shown to be significant) even decision difficulty is a significant predictor of the amount of time taken. However, in a departure from what prior theory was pointing to, task enjoyment and perceived option value do not influence the amount of time taken, in the presence of option framing.

It is important to note that the ANCOVA model we conducted is a linear regression-based ANCOVA. However, given that time taken is a duration variable, it should appropriately be modeled using a duration regression. We chose the simplest duration model, namely the exponential model for this purpose. We modeled the main and interaction effects by implementing effect codes in exponential regression. The exponential regression on time taken with effect codes implemented is essentially an ANCOVA analysis, using the appropriate non-linear regression analysis. The results are presented in table 10. The exponential-regression ANCOVA suggests that only the interaction between regulatory focus and option frame and decision difficulty are significant, while other factors and covariates are not. Hence, the inferences made by using the appropriate exponential regression-based ANCOVA, are the same as those made by running a linear ANCOVA (though the coefficient estimates across the inappropriate linear ANCOVA and the appropriate non-linear ANCOVA models were

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different). As such, we are reassured to learn that the inferences that were made based on the linear ANCOVA, were robust.

Table 10
Exponential Model Results for Time Taken

Coefficent	Exponential Model For Entire Sample
Intercept	3.28*
task_enjoyment	-.001
perceived_options_value	.003
purchase_commitment	.007
decision_difficulty	.037*
Regulatory Focus Main Effect	.04
Option Frame Main Effect	.015
Regulatory Focus X Option Frame Interaction Effect	-.067*
Log likelihood	-81.04
AIC	1.11

* suggests significance at 0.05 or lower

15.4 Decision Difficulty

For the level of difficulty in arriving at a choice decision, the main effect of option framing is not significant (F=0.45; p=.5) and the main effect of regulatory focus is not significant (F = 0.55; p=0.46). Neither is the interaction between option framing and regulatory focus significant (F = 0.22, p=0.88).

An analysis of contrasts suggests that, as expected, when the task was presented in a subtractive frame, promotion-oriented participants did find the task to be more difficult than did prevention-oriented participants. However, this difference was not significant (M's 6.89 vs. 6.54, F = 0.4, p=0.52). It is not clear why we do not find statistical significance for this result and thus do not find support for H5. Perhaps, the items we

used for measuring decision difficulty may not be capturing an essential facet of this construct. Future research should delve into this further. When the task was presented in an additive frame, promotion-oriented participants perceive the decision to be more difficult (but not significantly more) than do promotion-oriented participants (M's 6.58 vs. 6.35; F = .173, p = 0.67).

15.4 Perceived Value

For the value perceived in the final product (i.e. in the final choice of options selected), the main effect of regulatory focus is significant (F=5.5; p<.05) but the main effect of option framing is not significant (F = .934; p=.33). The interaction between option framing and regulatory focus is significant (F = 5.5; p<0.05).

An analysis of contrast in additive frame showed that when the task was presented in an additive frame, the value perceived by prevention and promotion-oriented participants was almost the same (F = .0, p = 0.99). Further an analysis of contrasts showed that when the task was presented in a subtractive frame, prevention-oriented participants perceived significantly less value than did promotion-oriented participants (M's 21.26 vs. 23.38, F = 11.1, p<.01). We thus find support for hypothesis $H6_{alternate2}$. These results hence suggest that prevention-oriented participants in subtractive frame become averse to losing the benefits of options even at the expense of overpaying in order to retain them. In contrast, promotion-oriented participants chose fewer options and they deem that they paid relatively less for those options and hence perceive relatively more value.

Given that we do not find support for hypothesis H6, we infer that consumers do not use the price of the base model (in the case of additive frame) or the price of the fully-loaded model (in the case of subtractive frame). Rather, consumers may be consciously or

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preconsciously calculating the final price of the product given the options that they had chosen.

15.4.1 Mediation Analysis

We hypothesized that the effect of regulatory focus on purchase commitment operates through the level of value that consumers perceive in the options that they have chosen.

To test support for hypothesis H7, we undertook a mediation analysis, by implementing the procedure suggested by Baron and Kenny (1986). The results of the ANOVA on perceived value suggest that the main effect of regulatory focus on perceived value in options is significant, while the main effect of option frame on perceived value is not significant. The interaction between regulatory focus and option framing, on perceived value in options chosen is significant. In the context of the mediation analysis, these results suggest that though perceived value in options chosen is influenced mainly by regulatory focus effects, option frame may have some influence on perceived value through the interaction. Further, the results of the ANOVA on purchase commitment shows that purchase commitment for the final product, the main effect of option framing is not significant (F=0). The main effect of regulatory focus is significant (F=3.8; p=0.05). Additionally, the interaction between option framing and regulatory focus is not significant (F = 0.11).

Hence, the main effect of option frame is not significant for both perceived value and for purchase commitment, while the main effect of regulatory focus is significant for both perceived value and purchase commitment. The interaction effect is significant for perceived value, but not significant for purchase commitment. Given this, we infer that that regulatory focus provides the main thrust behind the path from the interaction effect

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to perceived value and further on to purchase commitment. Further, we infer that option frame may have only a mild influence on the relationship, if at all.

Finally, we conducted an ANCOVA analysis with purchase commitment as the dependent measure and perceived value as a covariate. If the mediation relationship is to hold, we expect the covariate, perceived value, to be significant, while the main effect of regulatory focus to become insignificant. Per our expectations, the ANCOVA analysis shows that perceived value is a significant covariate ($F = 36.17$; $p < 0.01$), while the main effect of regulatory focus is not significant ($F = 1.02$; $p > 0.05$). Additionally, the interaction between regulatory focus and option framing is also not significant ($F=2.17$; $p > 0.05$).

Though an ANCOVA regression is essentially a regression analysis, given that the Baron and Kenny (1996) test of mediation is conducted in the context of regression analysis and not ANOVA, we conducted a regression-based test for mediation. A regression analysis first showed that the effect of chronic regulatory-focus score on the value perceived by participants in the options chosen, was significant ($B=18.13$, $p< .01$). A second regression analysis showed that chronic regulatory-focus was a significant predictor of purchase commitment ($B=17.18$, $p<.01$). A third regression showed that the value perceived in the options chosen was a significant predictor of purchase commitment ($B=8.15$, $p<.01$). Finally, when both chronic regulatory focus score and value perceived in options were together included as predictors of purchase commitment, the coefficient of chronic regulatory score was not significant ($B=0.49$, $p=0.22$) but the coefficient of value perceived in the options was still significant ($B=8.15$, $p<0.01$). Hence, we find that our mediation hypothesis holds true (Baron and Kenny 1996). Hence, we find support for hypothesis H7$_{alternate2}$.

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15.5 Two-Step Estimator

It is important to note that the ANCOVA analysis, that was discussed earlier, was conducted using linear regression mode. Given that time taken is a duration model, and the number of options is a count model, a linear ANCOVA is an inappropriate model. Essentially, the linear ANCOVA regression estimates are biased. To arrive at the unbiased model estimates, we specifically analyzed the combination of models 1 and 2, as model 3 using the two-step estimation method. Further, we also implemented Murphy-Topel correction for model 3. Table 11 provides the unbiased estimates for the model 3 (in column 1).

However, model 3 does not model cell conditions. To overcome that, we included dummy variables in the two-step model 3. We implemented 3 dummy variables in model 3 (assuming the cell with promotion-oriented participants under additive frame as the reference cell). The results (Table 11 column 2) show that cell 4 (promotion-oriented participants with subtractive framing) has a significantly different intercept than the other three cells.

It is important to note further, that the two-step Model 3 with cell condition dummies does not model the main and interaction effects between regulatory focus and option frames. Hence, we model the main and interaction effects by implementing effect codes in the two-step model 3 (results are presented in Table 11 column 3). Essentially, the two-step model 3 with effect codes is a nonlinear ANCOVA analysis, using the appropriate non-linear regression analysis. Hence, the two-step model 3 with effect codes is a non-linear ANCOVA analysis with unbiased coefficient estimates. Given that the two-step based non-linear ANCOVA provides unbiased coefficient estimates and significance, we put

higher credence in its results. The linear ANCOVA (results specified in table 9) suggested that the coefficient of perceived option value, task enjoyment and time taken are significant covariates of the ANCOVA on the number of options chosen. However, the non-linear ANCOVA suggests that the coefficients of perceived options value and task enjoyment are not significant. Time taken is the only significant covariate per the non-linear ANCOVA on the number of options chosen.

However, the results of the linear ANCOVA and the nonlinear ANCOVA are in unison in regards to significance of factors. Both of these analyses suggested that the main effect of regulatory focus was not significant, while the main effect of option frame and the interaction between regulatory focus and option frame were significant.

Table 11
Estimates for Model 3 Variations

Coefficent	2-step nonlinear Model 3 (Column 1)	2-step non-linear Model 3 with cell dummies (Column 2)	2-step non-linear Model 3 with effect codes – NONLINEAR ANCOVA (Column 3
Model 1: **Dependent Variable: *Time_Taken***			
Intercept	3.05*	3.05*	3.05*
task_enjoyment	-.0004	-.0004	-.0004
Perceived_options_value	.011	.011	.011
purchase_commitment	.0079	.0079	.0079
decision_difficulty	.0427*	.0427*	.0427*
Log likelihood	-83.81	-83.81	-83.81
AIC	1.10	1.10	1.10
Model 2: **Dependent Variable: *Num_Options***			
Intercept	2.737*	2.657*	2.695*
task_enjoyment	.0169*	.014 (p=0.07)	.014 (p=0.08)
Perceived_options_value	-0.019 (p=0.052)	-0.0119	-0.0119
purchase_commitment	0.012	0.0107	.0107
time_taken	-0.0149*	-0.016*	-0.161*
Cell 2 (promotion & subtractive frame)		0.094	
Cell 3 (prevention & additive frame)		-0.127 (p=0.067)	
Cell 4 (prevention & subtractive frame)		0.187*	
Regulatory Focus Main Effect			0.008
Option Frame Main Effect			-0.1023*
Regulatory Focus X Option Frame Interaction Effect			0.055*
Log likelihood	-374.79	-365.34	-383.8
AIC	4.68	4.609	4.609

* indicates that p-value was lower than 0.05

CHAPTER 16

GENERAL DISCUSSION

In this research, we present initial support for the general proposition that, in the face of a series of gains and losses, promotion-oriented consumers display a higher tendency to segregate gains, than do prevention-oriented consumers. Likewise, prevention-oriented consumers display a higher likelihood to integrate losses than do promotion-oriented consumers. The differences in shape of the value function of promotion and prevention-oriented peopled, is purported to be the foundation of this effect.

We then delve into how differences in the shape of the value functions due to differences in regulatory focus, interact with option framing, which forms the main focus on this paper. Study 2 results presents us with several interesting findings on interactions between option framing and regulatory focus. We find that the interaction between option-framing and regulatory focus impacts the number of options chosen and the consumers' reference price. We find parallel results for participants' reference price for the final product that they chose. Further, we find that the interaction between regulatory focus and option frame has significant effects on the time taken to make the decision, difficulty experienced in making the option selection choice and value perceived in the final choice.

Theoretical and Managerial Contributions:

In this research, we test and find support for a significant interaction between regulatory focus and option framing, on a number of key dependent variables. Going beyond the findings of Park et al., we firstly show that other dependent variables such as the amount of time taken to make decision, decision difficulty and perceived value in the options will

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also vary systematically in the context of the interaction between regulatory focus and option framing. Secondly, we show that participants' value perception of the options they chose mediates the relationship between regulatory focus and purchase commitment. Finally, we estimate a two-step maximum likelihood model to understand the influence of endogenous covariate, the amount of time taken to make the option-choice decision, and other covariates, on the number of options chosen.

Based on our findings, we argue that a manager, who is concerned with maximizing the size of the deal, should focus on option frame. However, the fact that we find support for hypothesis $H6_{alternate2}$ suggests that prevention-oriented consumers in subtractive frame, perceive relatively lower value in the options they choose. This can potentially cause such consumers to get dissatisfied. This can eventually affect future sales to such consumers. Given this, managers will have to make a judgment call on whether to implement a sale under the subtractive frame, when it comes to prevention-oriented consumers. If the product under consideration is one where the consumer has to make frequent repeat-purchases (for example, renewing a one-year cell phone service plan), then the manager may be better of not presenting the cell-phone plan in the subtractive frame. This will enable the manager to hedge in favor of not getting that customer dissatisfied and hence rendering a repeat purchase next year. However, if the product under consideration is a car, then, the manager may want to present the product in the subtractive frame, given that consumers do not purchase cars very frequently.

As compared to consumers who are prevention-focused, our findings suggest that things should be less complicated with promotion-oriented consumers. Also, our results also suggest that promotion-oriented consumers are not likely to perceive reduced value in the options that they choose in the final product, under any condition. The implication is

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that managers need not be concerned about presenting the product under any specific option frame, when it comes to westerners in general.

However, the mediation analysis results suggest that perceived value fully mediates the relationship between regulatory focus and purchase commitment. Hence, managers may not be at complete liberty to totally overlook the value perceived by consumers in the chosen options. Managers need to focus on raising perceived value in chosen options, if influencing purchase commitment is the objective they are targeting. Even when dealing with the less-challenging promotion-oriented consumers, managers have to ensure that such consumers perceive value in the options that they choose, so as to render an increased likelihood of purchase. This result, however, presents a particularly acute managerial challenge, when dealing with prevention-oriented consumers. Such consumers, under subtractive frame, tend to innately perceive low value in the chosen options.

In the context of the two-step estimation procedure, we argue that implementing the non-linear ANCOVA on the number of options chosen, provides as much a managerial implication as a methodological contribution. In terms of methodology, we believe that this is the first implementation in marketing, of a two-step estimator, where the first step is a duration model, and the second step is a count model. We utilize the two-step model to implement a non-linear ANCOVA analysis. We find that some aspects of the results of the non-linear ANCOVA are in contrast with those of the linear ANCOVA. Given that the non-linear ANCOVA model utilizes the appropriate distributions, while the linear ANCOVA does not, we bestow higher trust in the non-linear ANCOVA results. In line with non-linear ANCOVA, we thereby assume that value perceived in options chosen, does not influence the number of options chosen.

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The managerial implication of the non-linear ANCOVA is that task enjoyment positively impacts the number of options chosen. Additionally, the negative coefficient, of the amount of time taken to choose options, suggests that the more time consumers spend in finalizing the number of options, the fewer options they chose. Further, the level of difficulty encountered in finalizing the options, influences the amount of time required to finalize options. The implication is that managers need to figure out a way to ensure that consumers do not dwell on option-choice decision, for too long. Simultaneously, managers need to make the task of choosing options, an enjoyable experience. This suggests that managers need to be adept at quickly educating their customers, so that the customers can smoothly make option choice decisions without dwelling too long on it, and yet find this to be a fun task. Overall, our findings present a tall order for a manager, who wants to utilize option framing, to achieve her goals.

As we have noted earlier in the paper, prevention-focused people have a steeper value function on the loss side, and a flatter function on the gain side. One potential research question that arises from this research is what happens to the difference in value functions of promotion vs. prevention-focused persons as one goes "further out". For example, do the differences between prevention versus promotion-oriented people still matter when each of the losses (or gains) in the series of multiple losses (or gains) hit large values such as $100,000 etc. Future research can delve into this. We speculate that at such large individual steps, the value function will have flattened out for individual loss (or gain) for both prevention and promotion-oriented consumers, though at different levels. Hence, we expect that a single $100,000 loss may be lie at point (say, L2) on a prevention-oriented consumer's value function, and at point (say, L1) on a promotion-oriented consumer's value function. Yet loss level L2 will be larger than loss level L1,

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even though the value functions may have flattened out for both promotion and

prevention-oriented consumers. Hence, we conjecture that a series of $100,000 losses

may still yield the same results that we have proposed in this research.

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PART THREE

BE FIT AND BE STRONG; IF YOU ARE NOT FIT, YOU CAN STILL BE STRONG

CHAPTER 17

INTRODUCTION TO PART 3

Consider the situations with two Chief Executive Officers (CEOs), A and B. Both, A and

B are in a meeting with their respective board of directors. CEO A proposes to her board

that she has a gut feeling that their firm will be able to achieve much higher levels of

scale and scope efficiencies if they were to acquire firm Y. CEO A's of the cuff remark

immediately resonates with her board of directors, who in turn strongly back her

assertion on acquiring firm Y. As a result of this quick buttressing of her gut-feel, CEO A

now believes that it is worthwhile paying goodwill of upto 50% above firm Y's current

market value, in order to acquire firm C. In contrast, in his meeting with his board, CEO

B proposes that he has a gut feeling that firm Z may actually be overvalued by the stock

market, and as such may be a good target for acquisition at a below-market price, once

firm Z's impending sub-par quarterly results are announced in the next couple of months.

CEO B's board also backs his gut feel in a gesture displaying strong solidarity behind

their CEO's notions. As such, CEO B now believes that he should be paying less than

firm Z's current market value, in acquiring firm Z.

The question that we attempt to resolve in this research is whether the predetermination

on the values of the respective target firms, will change the method and styles of

information processing of both of these CEOs. We propose that in order to justify their

currently-vested gut feels, which have now become commitments, these two CEOs will

undertake vastly different motivated-processing styles, which will serve in achieving their

goal of arriving at their predetermined answers. In this study, we explore specific

theoretical implications of the influence of such prior commitments on their goal means, in the domain of regulatory focus.

Just as is possible with goals, an appropriate regulatory focus for pursuing goals can also be activated preconsciously (Higgins, Roney, Crowe and Hymes 1994). We extend this stream of research by proposing that consumers can preconsciously and consciously self-regulate by picking a goal means, so as instigate either a regulatory fit or a misfit as is required by the consumer's commitments, irrespective of whether the consumer is promotion oriented or prevention oriented.

Prior research has shown that consumers' motivation level determines whether regulatory fit occurs. Wang and Lee (2006) propose that, under low levels of involvement, consumers actively seek experiencing a regulatory fit by preferentially seeking out and elaborating specifically on information that renders a regulatory fit condition, over information that renders a regulatory misfit. However, under high levels of involvement, consumers give relatively high weight to substantive information, rather than preferentially seeking that information that helps them achieve regulatory fit. Extant research, however, lacks insight into whether consumers are also like to render a regulatory misfit under specific conditions, just as they are able to render a regulatory fit under specific conditions. This research is dedicated to filing this void in extant literature. We argue that committing to a goal is decisive in determining goal means. This research purports that when consumers commit themselves to a predetermined evaluation that is above (below) the market value of the stimulus, then they will automatically undertake processing strategies that instigate a regulatory fit (a regulatory misfit), irrespective of whether they are promotion or prevention oriented.

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In this research, we study the effect of the interaction between motivated cognition and regulatory focus on decision-making strategies and self-regulation. We will begin with a review of relevant concepts in regulatory-fit theory. Next, we will review relevant aspects of goal pursuit and goal means literature. Finally, we propose how people self regulate their goal means (and hence trigger either a regulatory fit or a regulatory misfit), so as to consciously or subconsciously self justify the predetermined value for the stimulus.

CHAPTER 18

REGULATORY-FIT THEORY

When people pursue a goal in a manner that positively echoes, fits and reinforces their current regulatory-focus (either promotion or prevention focus) and thereby upholding it, they are said to experience regulatory-fit (Avnet and Higgins (2006). In contrast, when people pursue a goal in a manner that subdues their current regulatory-focus (either promotion or prevention focus), thereby attenuating it, they are said to experience a regulatory misfit. For example, Avnet and Higgins (2006) manipulate regulatory-fit by asking promotion (prevention)-oriented participants by asking their participants to evaluate the stimulus on the basis of their affective responses (cognitive) responses toward it. A regulatory-misfit was produced by asking promotion (prevention)-oriented participants to evaluate the stimulus on the basis of their cognitive (affective) responses toward it. The underlying reason was that prior research by Pham and Avnet (2004) had shown that promotion (prevention)-oriented people tend to naturally evaluate stimuli based on affective-eagerness-based (cognitive-vigilance-oriented) association with it.

This manipulation is an example of process-based approach of producing regulatory fit (Aaker and Lee 2006), induced by directly asking participants to undertake a specific style of processing.

Additionally, Higgins et al. (2003) asked their participants to provide their choice between a mug and a pen (the mug is designed to be overwhelmingly chosen over the pen) and subsequently provide their price-estimate for the chosen object, by manipulating the gain/loss frame. Promotion (prevention)-oriented participants who were

asked to think in terms of what they would gain by choosing the mug/pen (what they would lose by not choosing the mug/pen) provided a higher price estimates for the chosen mug, given that these participants had experienced regulatory fit. On the other hand, hand promotion (prevention)-oriented participants who were asked to think in terms of what they would lose by not choosing the mug/pen (what they would gain by choosing) the mug/pen provided significantly lower price estimates for the chosen mug, given that these participants had experienced regulatory misfit.

The regulatory fit manipulation procedure used by Higgins et al. (2003) is an example of outcome-based approach of regulatory fit (Aaker and Lee 2006), induced by manipulating the salience of the outcomes to which people with distinct regulatory goals are sensitive.

For the purpose of this research, we assume that the two approaches of triggering regulatory fit or regulatory misfit (namely, process-based and outcome-based), are equivalent. Hence, we argue that if promotion (prevention)-oriented participants experienced regulatory fit by elaborating on a gain-framed (loss-framed) stimulus-message as would have been done in outcome-based approach, then these participants were likely evaluating that message based on their affective (cognitive) associations to it, as would have been done in the process-based approach, and vice versa.

Experiencing regulatory-fit leads participants to achieve a "feeling-right" state (Avnet and Higgins 2006), which in turn instills participants to have increased confidence in their decisions. This, in turn, further translates into increased evaluations for the stimulus (Avnet and Higgins 2006). This induces participants to specify a relatively higher price or and willingness-to-pay for the stimulus (Aaker and Lee 2006; Higgins et al. 2003). In

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contrast to that, in the case of a regulatory misfit, because of the mismatch, participants are unable to experience increased confidence and thus do not achieve a "feeling-right" state. In this situation, people specify a relatively lower willingness-to-pay because they lack the confidence that is induced when regulatory-fit is experienced. Avnet and Higgins (2006) argue that regulatory-fit effects offer a cleaner explanation to these findings than do alternative explanations, such as value transfer due to hedonic outcomes, mood effects etc.

CHAPTER 19

GOAL PURSUIT AND GOAL MEANS

Currently, there is a consensus among social psychologists that motivation and cognition are mutually dependent on each other, and hence social psychology is gradually moving towards the conceptualization of motivation as cognition, also referred to as motivated cognition (Higgins 1987; Kruglanski et al. 2002). Once a goal has been activated, it can automatically keep increasing the motivation to meet the goal, till it is finally fulfilled (Gollwitzer and Bargh 2005).

Kruglanksi et al. (2002) proposed goal-systems theory as a means of providing an explanation for motivated cognition in goal pursuit and associated behavioral choices. Goal-system theory proposes that for a specified goal, the goal means that provides the greatest expediency in achieving the goal is the one with the highest probability of being chosen. Shah and Kruglanski (2003) define a goal means as "any activity, event, or circumstance perceived as likely to contribute to the attainment of a goal. Going by this definition, a behavioral strategy targeted at advancing one's objective would qualify as means (Parks, Gollwitzer Oettingen 2007). Kruglanski (2006) also refers to a closely related concept of process goals. For the purpose of the current research, we refer to goal means and to process goals as being synonymous, and recognize them to be information processing style undertaken when attempting to achieve the activated goal.

An individual may have several choices of behavioral-goal means in order to pursue a goal. However, goal-systems theory predicts that undertaking a specific goal mean should come at the expense of activation of alternative means. Thus, for example, in

order to achieve top-notch physical stamina (current goal to be attained), an athlete may focus mainly on exercising heavily (goal mean 1) over focusing on developing a healthy dietary pattern (alternative means), though both these means are a part of the athlete's goal implementation plan. Further, goal implementation intentions also specify which behaviors could potentially obstruct goal pursuit and therefore need to be suppressed. Hence, an athlete may suppress excess consumption of alcoholic drinks so as to stay on the path of achieving top-notch stamina. The athlete may thus ignore beer commercials as a behavioral goal means, so as to assist her goal pursuits.

Traditionally, goal-pursuit theories have emphasized conscious guidance of behavior on a moment-to-moment basis. Once people decide on a higher-order goal, it is assumed they are motivated to work hard to successfully regulate many aspects of their thought and behavior. However, given that self-control is a limited resource, extant literature tends to suggest that self regulation in the context of achieving a higher-order goal, mainly occurs without the need of conscious direction (see Fitzsimons and Bargh 2004 for a review). We refer to self-regulation as an individual's attempt to guide thoughts and cognitions so as to assist the process of achieving the higher-order goal. Hence in the current context, self regulation refers to the selection of the most goal-relevant mean over the selection of goal-irrelevant means. Once people consciously make a specific choice (that is, commit to a higher-order goal), they consciously and nonconsciously regulate many aspects of their behavior and cognitions (that is, subconsciously regulate their goal means). People are instinctually led to pursue activities and low-level cognitions that are in harmony with their higher-order goals.

The current thought in extant social psychology is that goals may be activated either consciously or non-consciously. Further, such goals, no matter how they are activated,

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can elicit both conscious and automatic action and provide guidance in ongoing

situational and behavioral demands that can help achieve the goal expediently (Bargh et

al. 2001). Additionally, environmental cues can, outside of awareness, highlight which

actions are relevant to the goals, and thereby assist the pursuit of those specific actions.

Further, Bargh et al. argue that the automatic adoption of the relevant goal means, so as

to assist the goal is not an outcome of learned habitual response. Rather, such behavior

should be viewed as a spontaneous response to events as they unfold in a given

situation.

CHAPTER 20

SELF REGUTLATION AND GOAL MEANS

We extend these findings in the goal pursuit and goal means literature to the domain of regulatory focus. The higher-order-attainment goal, in the current research, is the stimulus' predetermined evaluation, which the individual has already committed to. The goal means is the upward or downward self-regulation (that is, an information processing strategy), undertaken by the individual, so as to ensure that the predetermined evaluation of the stimulus can indeed be self-justified.

Goals can be activated and regulated when an individual senses (consciously or preconsciously) an inconsistency between what she perceives her current state as and what she strives for her state to turn out as (Moskowitz 2002). In the context of this study, participants in the overvalued (undervalue) condition sense that they are committed to evaluating the stimulus higher (lower) than its market valuation. The inconsistency that needs to be resolved is the difference between the market value and the precommited valuation for the stimulus.

We propose that consumers have a nonconscious intuitive sense that they must need to experience regulatory fit when evaluating a stimulus, if they are already committed to a predetermined high value for the stimulus. Thus, if a consumer is pre-committed to paying a price for a product, which was higher than its market value, then, per Bem's (1967) self-perception theory, the consumer will infer that she must have evaluated the stimulus very positively and will experience a steep sense of victory if she is able to own that product. Conversely, our theorization is that consumers have an intuitive sense that

they need to have experienced a regulatory misfit, if they are committed to predetermined lower-than-market value for the stimulus. Hence, if a consumer senses that she is willing to pay a price that is lower than its usual market price of the product, then, that consumer will infer that she must have held a low evaluation for the stimulus and will not experience a steep sense of loss if she were unable to own that product.

As such, in a reversal of the process of regulatory fit, we argue that consumers will regulate their processing style, and thereby, their levels of regulatory focus, in order to achieve regulatory fit or regulatory misfit, depending on whether their offered price was above or below the market value respectively.

To explore these issues, we will undertake a 2 regulatory focus (promotion orientation vs. prevention orientation) X 2 predetermined evaluation (overvalued vs. undervalued) experiment. We predict that promotion (prevention)-oriented consumers, who are committed to a predetermined overvaluation of the stimulus, will voluntarily self regulate by picking a goal mean so as to trigger a promotion (prevention) based regulatory fit. In this case, we thus predict that participants will voluntarily undertake information processing strategies that lead to strengthening of their promotion (prevention) tendencies.

Conversely, promotion (prevention)-oriented consumers, who are committed to predetermined undervaluation for the stimulus, will self regulate by picking a goal means so as to trigger a regulatory misfit. Such participants will voluntarily undertake information processing strategies that weaken prevention (promotion) tendencies. As such, these participants will voluntarily trigger a regulatory misfit.

Kruglanski (2006) proposes that regulatory fit may be viewed as conditions for which the manner of goal pursuit matches the goal means involved, and regulatory misfit conditions as those for which it does not match. Though the motivation for the current research is based on Kruglanksi's (2006) goal-system theory based explanation of regulatory fit, we depart from Kruglanksi's reasoning, in two important respects. First, goal systems theory describes a goal means as multifinal if it serves several objectives. A goal means is described as unifinal if it serves only one objective. Kruglanski (2006) proposes that experiencing regulatory fit represents a situation where a multifinal goal means has been adopted, given that participants meet both, the focal goal assigned by the experimenter (e.g. choosing between the pen and the mug in the case of Higgins et al. 2003) and the background goal (e.g. satisfaction of the regulatory focus process goal or another type of process goal). Kruglanksi (2006) further seems to suggest (p.12, 13) however, that a situation in which participants self-regulate downwards, necessarily is the one where the participant relies on a unifinal means. Though the reasoning behind Kruglanski's unifinal-goal-means interpretation in the downward self-regulation case is not clear to us, it is probably because a supposedly negative goal is said to not have had matched with a desired process goal, for downward self regulation to occur.

In contrast, we believe that when participants voluntarily self regulate either upwards or downwards by using specific goal means, given an attainment goal, then that goal means has to be multifinal. Irrespective of whether participants are in the condition where they self regulate upwards or in the condition where they self regulate downwards, participants are still fulfilling both, the task assigned to them by the researcher, and the background goal (e.g. experiencing regulatory fit or misfit depending on whether they are precommited to overvaluing or undervaluing the stimulus).

Secondly, in contrast to Kruglanksi's assumption, we do not subscribe to the notion that a goal has to be viewed negatively by the participant when participants voluntarily self regulate downwards. Rather, we argue that because participants willingly undertake specific processing means so as to trigger a regulatory misfit, it must be that they invariably perceive their higher-order attainment goal undervaluing the stimulus in positive light. We suggest however, that the researcher has to conduct appropriate priming to ensure that participant is indeed firmly committed to her goal (in this case, commitment to the predetermined price for the stimulus).

Importantly, this research is not aimed at understanding whether the adoption of the goal-relevant means is preconscious or occurs within the realm of conscious choice. As is customarily presumed in the goal-pursuit and goal-means literature, and in the goal-systems theory, we assume that the choice of the goal means may well be occurring outside of people's conscious awareness. However, in line with the emerging consensus in Social Psychology (Bargh et al. 2001 etc.) we acknowledge that perhaps, this process of choosing the appropriate goal mean may be a result of a combination of conscious and preconscious cognition. Further, we argue that the aftereffects of participants' self regulation continue to linger (Avnet and Higgins 2006). Hence, promotion-oriented participants who are committed to overvaluing (undervaluing) the stimulus will display higher (lower) levels of promotion tendencies and "feeling right" confidence at the end of the exercise. By the same token, prevention-oriented participants who are committed to overvaluing (undervaluing) the stimulus will display higher (lower) levels of prevention tendencies and "feeling right" confidence at the end of the exercise.

Ferguson and Bargh (2005) have shown that goal-relevant objects are automatically evaluated in a friendly manner during active goal pursuit. Goal-relevant objects receive a

higher evaluation either because positive thoughts about that object are made more accessible, or negative thoughts about that object are suppressed, or both. Ferguson and Bargh also find support for the hypothesis that the importance of the goal should moderate how highly will the goal pursuit influence the positive evaluation of the object. If the goal is very important, then the object will be evaluated very positively.

Higgins et al. (2003) generated a regulatory fit in their participants by asking promotion (prevention)-oriented participants to think in terms of what they would gain by choosing the mug/pen (what they would lose by not choosing the mug/pen).Hence, relying on the findings by Ferguson and Bargh, we propose that consumers will focus on the relevant outcomes so to ensure that they achieve their goals. Hence, we argue that in the overvaluation condition, promotion (prevention) oriented consumers will voluntarily think in terms of what they will attain if they get to own (what they will lose if they do not get to own) the stimulus, in contrast to such consumers in the undervaluation condition who will not.

Further, we argue that promotion (prevention) oriented consumers in the undervaluation condition will voluntarily try to suppress thinking in terms of what they will attain if they get to own the stimulus (what they lose if they do not get to own the stimulus) .Rather such consumers focus on what they will lose if they do not own the stimulus (what they will attain if they get to own the stimulus), in contrast to promotion (prevention)-oriented consumers in overvaluation condition who will not.

Hence, overall, we expect that consumers in the overvaluation condition will realize a regulatory fit and evade a regulatory misfit. Conversely, we expect consumers in the undervaluation condition to realize a regulatory misfit and evade a regulatory fit.

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20.1 Dependent-Measure Details

Promotion (prevention)-oriented consumers tend to naturally construe an object at a more abstract-global level (concrete-local level) (Forster and Higgins 2005; Keller, Lee and Sternthal 2008). Further, Avnet and Higgins (2006) argue that the experience of feeling right, as an outcome of undergoing a regulatory fit, need not be applicable to the evaluated stimulus to have an effect on decision value. This suggests that once regulatory fit is experienced not only the target stimulus, but any other objects will be evaluated positively. In other words, once a particular goal-means strategy is undertaken when experiencing regulatory fit, then that goal means strategy persists even in the case of evaluating a non-stimulus object might, given that all objects become game for undertaking that same goal-means strategy.

Given this, we use the Navon task (Navon 1977) to check whether our participants are visually processing at an abstract-global or concrete-local level. Promotion-oriented participants in the overvalued condition will have a higher tendency to process information at an abstract-global level, as compared to promotion-oriented participants in the undervalued condition. Likewise, prevention-oriented participants in the overvalued condition will have a higher tendency to process information at a concrete-local level, as compared to promotion-oriented participants in the undervalued condition.

In visual perception research, Gasper and Clore (2002) have used the Navon task successfully to measure the levels of concrete vs. abstract processing. A different version of Navon task has also been used in regulatory focus research by Forster and Higgins (2005). The Navon task stimuli we use are based on the ones used by Gasper and Clore (2002), whereby the same objects are sometimes the global and sometimes

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the local stimulus. Participants will see an overall shape (e.g. square) made up of smaller geometric figures (e.g. squares), on the top. Participants are requested to respond to which one of the lower two shapes is more similar to the shape on the top. For the Navon figure shown in the figure 2, if participants are visually processing information at a concrete-local level, they will tend to answer the shape on the bottom-left as being more similar to the shape on the top (shape matching occurring at the smaller, local, constituent figures).However, participants, who are visually processing information at an abstract-global level, will tend to answer the shape on the bottom-right as more similar to the shape on the top (shape matching occurring at an overall outer profile shape).

We will display 8 Navon-task figures to participants. Figure 2 shows an example of a Navon-task figure. The number of times the participants matches the shapes on the basis of their global form rather than their local details, will be calculated. This score will be used as a dependent measure. The higher (lower) the score the participant on this measure, the more (the lower) is her processing at an abstract-global level.
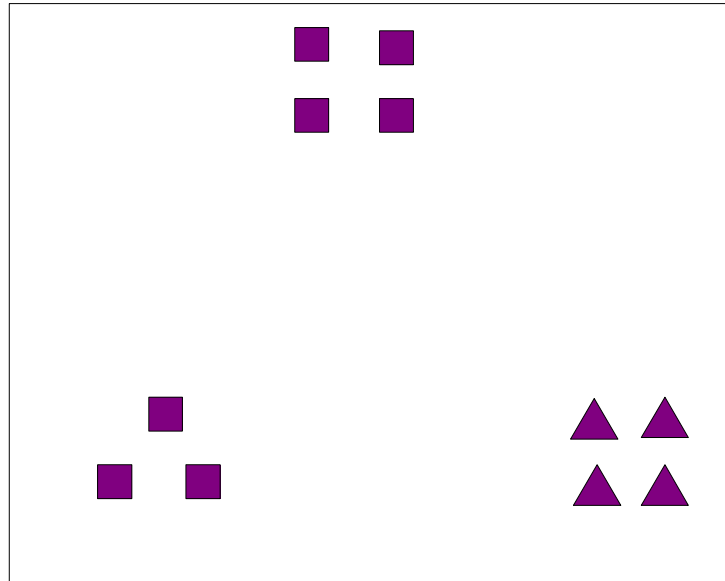
Figure 2
Navon-Task Figure

We predict that promotion-oriented participants, who are pre-committed to higher-than-market-value price for the product, will have a significantly HIGHER score on Navon task, than promotion-oriented participants who are pre-committed to a lower-than-market-value price for the stimulus. Conversely, we predict that prevention-oriented participants, who are pre-committed to higher-than-market-value price for the product, will have a significantly LOWER score on the Navon task than prevention-oriented participants who are pre-committed to a lower-than-market-value price for the stimulus.

We will also administer the Behavioral Identification Form (BIF; Vallacher & Wegner, 1989) as a means of measuring their tendency construe actions in low- versus high-level terms. The BIF scale has 25 binary-response items. Keller, Lee and Sternthal (2008)

have successfully used the BIF scale to measure the participants' level of construal. The BIF scale measures whether an action (e.g., reading) is construed at a low-level as "following lines of print", or at a high-level as "gaining knowledge". The BIF scale uses 25 such binary items of classifying behaviors into low-or-high levels of construal. As is done by Kellar et al. we will sum scores of each participant across the 25 items (coding high-level construal as "1", and low-level construal as "0").

CHAPTER 21

STUDY 1

21.1 Participants and Stimulus

A total of 183 undergraduate students from a major university in the south participated in the study. Our aim was to use a stimulus that the student participants could understand. Secondly, given that we were going to prime participants to substantially overvalue or undervalue the stimulus, this study required that the stimulus' price not be entirely explicit. Since we wanted to have strong manipulations, we were planning on manipulating the valuation factor by specifying offered prices that were roughly 33% above (for the overvalued condition) and 33% below (for the undervalued condition) the marked price of the product.

Utilitarian products tend to have prices that can be specified fairly accurately. In contrast, hedonic products tend to have prices that are not explicit. Further, the experiential benefits of hedonic products cannot be clearly quantified in terms of price. This causes people to be more prone to severely overvaluing or undervaluing a hedonic product, in comparison to a utilitarian product. Hence, in order to confer external validity and to enable us to have strong effects of the valuation condition, we finalized on a hedonic product as our best option for stimulus. We chose the Movado Men's Moderno (#0604230) watch as the stimulus for this study. Movado is among the well known brands of Swiss watches.

This study is a 2 regulatory focus (promotion orientation vs. prevention orientation) X 2 predetermined evaluation condition (overvalued vs. undervalued) design.

21.2 Procedure

The study was conducted using Metacard software, which had the pictures of the stimulus, and other manipulation details preprogrammed in advance. Participants worked with the software in an interactive manner, such that the software presented the participants with information about the stimulus and other details, and then asked the participants to make choices on the Navon task, BIF and demographic measures. The authors worked with participants in groups that ranged from 2 to 14 people in size. Participants were presented with 2 pictures of the Movado Mens Moderno (#0604230) watch and were asked to take a few moments to review it.

The overvaluation condition was manipulated by specifying to the participant that he/she has finalized on the Movado Moderno (#0604230) as a gift for his/her father on his upcoming birthday. Further, given that his/her father is a connoisseur of Swiss watches, the participant has decided to bid $395 on Ebay for that Movado watch, which is normally priced at $295 but not available on amazon.com. In an effort to confer external validity to the scenario, we provided more background information about why the participant has decided to bid $395 for the Movado, when it was priced for $295, on amazon.com.

People would rather not buy hedonic gifts for themselves; however, people like to receive hedonic items as gifts (Okada 2005; Thaler 1980). Hence, buying the Movado as a gift for the father was seen as the appropriate scenario for the overvaluation condition. However, given the findings by Okada and Thaler, presenting a scenario involving

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buying the Movado as gift for himself/herself, lent itself better for the undervaluation condition.

Hence, the undervaluation condition was manipulated by specifying to the participant that she has finalized on the Movado Moderno (#0604230) as a gift for himself/herself. Further, given that the participant does not yet have a job in this bad economy, the participant has decided to bid $195 on Ebay for that Movado watch, which is normally priced at $295 but not available on amazon.com. Again, in an effort to confer external validity to the scenario, we provided more background information about why the participant has decided to bid only $195 for the Movado, when it was priced for $295, on amazon.com. The details of the manipulation are provided in appendix D, which presents the instrument used in this study.

Participants then responded to two valuation manipulation check items, "I focused mainly on why overvaluing the Movado, when submitting my bid on Ebay, is the right decision for me" (that is, the "overvaluation focus" item) and I focused mainly on why undervaluing the Movado, when submitting my bid on Ebay, is the right decision for me" (that is, the "undervaluation focus" item)on a 1 (strongly disagree) to 7 (strongly agree). Next, the participants then responded to the 25 item Behavioral Identification Form (BIF; Vallacher & Wegner, 1989) scale. After that, participants responded to 8 navon figures.

The participants then responded to the 18-item chronic regulatory focus scale by Lockwood, Jordan and Kunda (2002). Participants were classified as promotion or prevention oriented by median splitting them based on their score on this scale. The participants finally responded to some demographic items, and were granted credit for participation and were excused.

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CHAPTER 22

RESULTS and DISCUSSION

Cell means for all the dependent measures are presented in table 12.

Table 12
ANOVA Results

Dependent Variable	Promotion Focus		Prevention Focus	
	Overvaluation Condition	Undervaluation Condition	Overvaluation Condition	Undervaluation Condition
Overvaluation Focus	5.39	2.23	5.45	2.7
Undervaluation Focus	2.66	5.2	2.47	4.9
BIF score	16.55	15.14	14.88	16.8
Navon task scores	5.74	4.79	4.9	5.4

22.1 Manipulation Checks

First, we conducted manipulation checks. For the "overvaluation focus" item, the main effect of the valuation condition factor is significant (F=391.8; p <0.01). A test of contrasts showed that participants had significantly higher focus on overvaluation of the stimulus in the overvaluation condition, in comparison to in the in the undervaluation condition (M's 5.43 vs. 2.46; F=187.5; p<0.01). The regulatory focus main effect and the interaction effect are not significant.

Likewise, for the "undervaluation focus" item, the main effect of the valuation condition factor is significant (F=127.7; p <0.01). A test of contrasts showed that participants had significantly lower focus on undervaluation of the stimulus in the overvaluation condition,

in comparison to in the undervaluation condition (M's 2.56 vs. 5.05; F=127.7; p<0.01). The regulatory focus main effect and the interaction effect are not significant.

22.2 BIF Scores

For BIF scores, the interaction between regulatory focus and valuation condition is significant (F=7.04; p<0.01). A test of contrasts showed that as expected, for people who were promotion oriented, those in the overvaluation condition had a higher (but not statistically significant) BIF score in comparison to those in the undervaluation condition (M's 16.55 vs. 15.14; F = 2.015; p = 0.15). For prevention-oriented people, those in the overvaluation condition had a significantly lower BIF score in comparison to those in the undervaluation condition (M's 14.88 vs. 16.8; F = 5.41 ; p = 0.09). The main effects of regulatory focus and valuation condition were not significant.

2.3 Navon-Task Scores

For Navon task scores, the interaction between regulatory focus and evaluation condition is significant (F=4.19; p<0.05). A test of contrasts showed that as expected, for people who were promotion oriented, those in the overvaluation condition had a higher score in comparison to those in the undervaluation condition (M's 5.74 vs. 4.79; F = 3.93; p < 0.05). For prevention-oriented people, those in the overvaluation condition had a lower (but not statistically significant) score in comparison to those in the undervaluation condition (M's 4.9 vs. 5.4; F = 0.86 ; p =0.36). The main effects of regulatory focus and valuation condition were not significant.

CHAPTER 23

GENERAL DISCUSSION

In this paper, we argue that if consumers commit themselves to a predetermined level of evaluation for the stimulus, then they will process information pertaining to the stimulus using only specific processing strategies. In this study, we explore support for this general principle in the domain of regulatory focus. When consumers commit themselves to a predetermined evaluation that is above (below) the market value of the stimulus, then they will automatically undertake processing strategies that instigate a regulatory fit (a regulatory misfit). This happens for both, promotion-oriented and prevention-oriented consumers.

Using Navon task, we find marginal evidence that in the overvaluation condition, both promotion and prevention oriented participants actually instigated a regulatory fit. Additionally, in the undervaluation condition, we find marginal evidence that both promotion and prevention oriented participants instigated a regulatory misfit.

Based on the Navon task, we can imply that the regulatory fit or misfit instigated tends to linger beyond the target object and, temporally, at least for some time after the commitment to the overvaluation or undervaluation of the target object has been made.

Much research in regulatory focus has focused on how regulatory fit can be generated by having participants undertake specific goal means or by asking participants to think in terms of specific outcomes (Aaker and Lee 2006). However, we believe that ours is the first research that experimentally shows that motivated consumers will consciously or

nonconsciously chose specific goal means or will think in terms of specific outcomes, so as to instigate a regulatory fit or a regulatory misfit.

Shah and Kruglanski (2002) and Kruglanski et al. (2002) and others investigate the goal-mean link, which implies a spread of activation from goals to means. That research stream suggests that in the motivational hierarchy, goals are at the top of the chain. Activation of a specific attainment goal leads to the subsequent activation of the most expedient goal means. Such a hierarchy is termed as "top-down". We argue that the self-regulation effect, which is the focus of the current research, seems to be an example of this top-down condition.

However, research by Shah and Kruglanski (2003) also suggests a different hierarchy. Their research suggests a reverse direction of activation is also possible, and hence it is referred to as "bottom-up". Their claim is that a goal will automatically be activated based on the goal mean that the individual undertakes. We argue that regulatory-fit as is generated by using process means or outcome means (Aaker and Lee 2006) are examples of the bottom-up condition. In this condition, participants undertake a specific goal means (for example, participants are asked to mainly focus on affective association or on cognitive reasoning, as was done in Pham and Avnet 2004) leads to the activation of a specific goal (for example, evaluating the stimulus positively).

The current research establishes the foundation that some aspect of undertaking the goal means to instigate either a regulatory fit or misfit may be occurring outside of consciousness. Future research should focus on whether there are any specific goal means or outcomes which can occur fully under conscious control or fully under

nonconscious control. Further, future research could focus on how long the effects, of

the regulatory fit and misfit instigated by consumers, linger.

23.1 Managerial Implication

Given the outcomes with the Navon task score this research has established that the

effects of instigating regulatory fit or regulatory misfit, can be transferred to other objects,

beyond the target object. As such, even object that are beyond the core stimulus

become game for over and under evaluation. This suggests that a consumer, who is

precommitted to overvaluing a target object, will have a strong tendency to overvalue

other objects, for a reasonable amount of time. Likewise, a consumer, who is

precommitted to undervaluing a target object, will tend to undervalue and hence harbor a

lower willingness-to-pay for other objects. Managers need to be keenly aware of this

phenomenon and can use it to their advantage.

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APPENDIX A

TWO-STEP ESTIMATION CALCULATION DETAILS

Step 1

We chose the exponential distribution, $f_1(y_1| x_1, \Theta_1)$ for model (1)

hence, $f_1(y_1| x_1, \Theta_1) = d\exp(-dy_1)$, the exponential distribution,

such that, $d = \exp(x_1\Theta_1)$,

where,

y_1 is time_taken,

x_1 contains task_enjoyment, options_value, purchase_commitment and

decision_difficulty,

Θ_1 contains the coefficients of task_enjoyment, options_value, purchase_commitment

and decision_difficulty

Taking the natural log of $f_1(y_1| x_1, \Theta_1)$, we get:

ln $f_1(y_1| x_1, \Theta_1) = x_1\Theta_1 - \exp(x_1\Theta_1)y_1$

Essentially, we conducted an exponential regression with y_1 as the dependent measure

and x_1 as the independent variables. Θ_1 are the coefficient estimates and V_1 is the

asymptotic covariance matrix of coefficients calculated for this exponential regression.

As required for the Murphy and Topel (1985) correction, taking partial derivative of f_1 with

respect to Θ_1, we get:

$$\frac{\partial \ln f_1(y_1 \mid x_1, \Theta_1)}{\partial \Theta_1} = \sum x_1 (1 - \exp(x_1 \Theta_1) y_1) \qquad \underline{\qquad}(4)$$

<u>Step 2:</u>

Next, we chose the poisson distribution, $f_2(y_2 \mid x_1, x_2, \Theta_1, \Theta_2)$ for model (3)

hence, $f_2(y_2 \mid x_1, x_2, \Theta_1, \Theta_2) = \dfrac{e^{-\lambda}\lambda^{y_2}}{y_2!}$, the poisson distribution,

such that, $E[y_2] = \lambda = \exp(x_2\Theta_2)$

where,

y_2 is num_options,

x_2 contains task_enjoyment, options_value, and purchase_commitment. Note that x_2

contains all the predictors in model 3, expect the endogeneous covariate, time_taken,

Θ_1 contains the coefficient of task_enjoyment, options_value, purchase_commitment and

decision_difficulty estimated by executing the exponential duration regression, $f_1(y_1 \mid x_1,$

$\Theta_1) = dexp(-dy_1)$,

Θ_2 contains the coefficients of task_enjoyment, options_value, purchase_commitment

and time_taken based on running the model 3 regression

Next, as is done in two-step estimation, the predictions for the endogeneous covariate

y_1, based on the exponential duration regression (namely, $\exp(x_1\Theta_1)$), were appended

to x_2.

Taking natural log of $f_2(y_2 \mid x_2, \Theta_2, x_1, \Theta_1)$, we get

$$\ln f_2(y_2 \mid x_2, \Theta_2, x_1, \Theta_1) = \sum -\exp\left(\left[\begin{array}{c} x_2 \\ (\exp(x_1\,\Theta_1)) \end{array}\right]\Theta_2\right) + y_2\left[\begin{array}{c} x_2 \\ (\exp(x_1\,\Theta_1)) \end{array}\right]\Theta_2 - \ln(y_2!)$$

Essentially, we conducted a poisson regression with y_2 as the dependent measure and x_2 and appended predictions for y_1 as the independent variables. Θ_2 are the coefficient estimates and V_2 is the asymptotic covariance matrix of coefficients calculated for this poisson regression.

Next, as required for the Murphy and Topel (1985) correction, taking partial derivative of f_2 with respect to Θ_2, we get:

$$\frac{\partial \ln f_2(y_2 \mid x_2, \Theta_2, x_1, \Theta_1)}{\partial \Theta_2} = \sum \left\{ (y_2 - \exp\left(\left[\begin{array}{c} x_2 \\ (\exp(x_1\,\Theta_1)) \end{array}\right]\Theta_2\right)\left[\begin{array}{c} x_2 \\ (\exp(x_1\,\Theta_1)) \end{array}\right] \right\} \qquad \underline{\hspace{1cm}}(5)$$

Next, as required for the Murphy and Topel (1985) correction, taking partial derivative of f_2 with respect to Θ_1, we get:

$$\frac{\partial \ln f_2(y_2 \mid x_2, \Theta_2, x_1, \Theta_1)}{\partial \Theta_1} = \sum \left\{ x_1 \exp(x_1\,\Theta_1)[y_2 - \exp\left(\left[\begin{array}{c} x_2 \\ (\exp(x_1\,\Theta_1)) \end{array}\right]\Theta_2)]\right\} \qquad \underline{\hspace{1cm}}(6)$$

Coefficient estimates of two-step estimation are consistent and asymptotically normal (Wooldridge (2002 p.414; Greene 2007 p.508). Hence, Θ_2 is consistent and asymptotically normal. However, a correction needs to be made to the asymptotic covariance matrix of the coefficients of poisson regression in step 2 (that is, V_2) to account for an estimate of Θ_1 being used in the estimation of Θ_2. We will rely on the

Murphy and Topel (1985) correction procedure to implement this correction (as aid out in

Greene 2007 p.507).

To do that, define two matrices R and C as follows:

$$C = \frac{1}{n}\sum\left[\frac{\partial \ln f_2(y_2 \mid x_2, \Theta_2, x_1, \Theta_1)}{\partial \Theta_2}\right]\left[\frac{\partial \ln f_2(y_2 \mid x_2, \Theta_2, x_1, \Theta_1)}{\partial \Theta_1}\right]$$

and

$$R = \frac{1}{n}\sum\left[\frac{\partial \ln f_2(y_2 \mid x_2, \Theta_2, x_1, \Theta_1)}{\partial \Theta_2}\right]\left[\frac{\partial \ln f_1(y_1 \mid x_1, \Theta_1)}{\partial \Theta_1}\right]$$

where, equations (4), (5) and (6) provide the values that are used to build matrices C

and R.

Muphy and Topel (1985) suggest that the corrected covariance matrix for the estimator

in step 2, namely $V_2^{@}$, be calculated as follows:

$V_2^{@} = 1/n [V_2 + V_2 (CV_1C' - RV_1C' - CV_1R']V_2]$

where as mentioned earlier V_1 is the asymptotic covariance matrix of coefficients of the

exponential regression, that is, $f_1(y_1 \mid x_1, \Theta_1)$, estimated in step 1,

and V_2 is the original asymptotic covariance matrix of coefficients of the poisson

regression, that is $f_2(y_2 \mid x_2, \Theta_2, x_1, \Theta_1)$, estimated in step 2.

Essentially, $V_2^@$ is the Murphy and Topel corrected covariance matrix of coefficients of model 3. Murphy and Topel correction procedure advocates that we use matrix $V_2^@$ for testing the significance of the coefficients of model 3 (instead of using matrix $V_2^)$. However, note that the Murphy and Topel correction relies in the same coefficients that were estimated in the poisson regression in step 2. Hence, the correction does not impact the coefficients that were estimated in the step 2 regression. Murphy and Topel correction impact only the significance inferences of the predictors in the step2 regression, as we utilize the covariance matrix $V_2^@$ (instead of V_2) in making significance inferences for the step 2 regression coefficients.

PART 1 STUDY 1 INSTRUMENT

This study was implemented using Qualtrics. The instrument was laid out as follows:

Dear Participant:

General Instructions: Please read each question carefully, and answer each question to the best of your ability to answer. Try to fill the space provided for each open-ended answer. When responding to a 1 -9 scaled question, please do so in a thoughtful manner. Some of the questions may be abstract. In that case, please answer them to the best of your ability. There is no time limit his study. You are free to work at your own pace and you may continue working on this section until you have completed responding to all questions in this questionnaire. If you have any questions, please raise your hand, and the moderator will come to your seat and assist you. We are interested in analyzing averages of people's responses to the questions, over a large group of people. As such, we want to assure you that your individual responses will be kept confidential.

The following procedure was undertaken to prime **promotion focus**:
As a part of this study, we want to understand how people's hopes and goals evolve over time.

Please take 2-3 minutes to think hard about the hopes and goals that you had in the past (e.g., as you were growing up). By hopes and goals, we mean the things you really wanted to achieve or obtain, your aspirations, your dreams.

Please write at least three of these past hopes and goals in the space below.

For example:

1. When I was 14 years old, I wanted to have fun and travel around the world.

2.........

3.........

Now, please take 2-3 minutes to think about your hopes and goals as they are today. What are the things you really want to achieve now, the things you are aspiring to, dreaming of, for the future.

Please write at least three of these present hopes and goals in the space below.

For example:

1.Today I am a business-school student, and I hope to have a successful career in management and strategy consulting.

2.........

3.........

We asked participants to undertake a similar task to **prime prevention focus**.

As a part of this study, we want to understand how people's sense of duty and obligations evolve over time.

Please take 2-3 minutes to think hard about the duties and obligations that you had in

the past (e.g., as you were growing up). By duties and obligations, we mean the things

that you were expected or required to do, your responsibilities, the things you were

trusted to do, the things you knew you ought to do.

Please write at least three of these past duties and obligations.

For Example:

1. When I was in junior high, my parents really expected me to have good grades in

every single class. They also expected me to take care of my baby sister all the time.

2. ….

3.…….

Now, please take 2-3 minutes to think about your duties and obligations as they are

today. What are the things you expected to do now? What are your new responsibilities?

What are your commitments, the things you know you ought to do?

Please write at least three of these present duties and obligations.

For example:

1. Today, I need to get a job soon because I have to pay back loans, and I also feel I

need to make my Parents proud of me.

2.........

3.........

Manipulation Check measures:

> If I had to choose right now, I would prefer to do

What others   What I want

expect of me   to do

      1   2   3   4   5   6   7

> If I had to choose right now, I would rather

Go wherever my   Whatever it takes to

heart takes me   fulfill my responsibilities

      1   2   3   4   5   6   7

>I prefer to

take a trip   pay back

around the world   my loans

      1   2   3   4   5   6   7

Take a few minutes to review the following two laptops, namely, and the HP Artist

Edition dv2800 and the HP Pavilion dv6744.

Figure 3
HP Artist Edition

PROCESSOR
Intel Core 2 Duo T9300 (2.5GHz/6MB L2 Cache)

MEMORY
3GB DDR2 SDRAM (1x2048/1x1024MB)

HARD DRIVE
160GB 5400 RPM SATA Hard Drive

DISPLAY
14.1" WXGA BrightView Widescreen (1280x800)

MULTIMEDIA DRIVE
Super Multi 8X DVDRW w/Double Layer Support

VIDEO GRAPHICS
NVIDIA GeForce 8400M GS w/Webcam
DIGITAL MEDIA
5-in-1 media card reader

COMMUNICATION
Intel Wireless WiFi Link 4965AGN Network Connection

Figure 4
HP Artist – Features List

Figure 5
HP Pavilion Edition

PROCESSOR
Intel Core 2 Duo Processor T5450 1.67GHz

MEMORY
2048 MB (2 x 1024 MB)

HARD DRIVE
250 GB (5400 rpm)

DISPLAY
15.4" WXGA BrightView Widescreen
(1280x800)

MULTIMEDIA DRIVE
Super Multi 8X DVD+/-R/RW w/Double Layer
Support

VIDEO GRAPHICS
NVIDIA GeForce 8400M
DIGITAL MEDIA
5-in-1 media card reader

COMMUNICATION
High speed 56K modem

Figure 6
HP Pavilion - Features List

>Assume that you have been meaning to buy the HP Artist Edition dv2800 (referred to

as HP Artist henceforth), for some time now. Unfortunately, the HP Artist is not available

at amazon.com. A comparable laptop, the HP Pavilion dv6744 laptop (referred to as HP

Pavilion henceforth) is available on amazon.com for $694. However, the HP Artist laptop

is available for sale, through an ebay-like website. This website claims to buy laptops on

a bulk basis directly from the manufacturer, and is open to considering a price that you

may want to offer for the HP Artist laptop. Note that that this specialized contractor

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retains the right to reject your offer, if she feels that your offered price is not acceptable, given the quality of laptop that she sells.

(*Dependent Measures*)

Given the information that you have now,

> What is the most (in dollars) that you would be willing to pay for the HP Artist laptop?

> What is the least (in dollars) that you would be willing to pay for the HP Artist laptop? (Please note that the minimum price that you agree to pay need not be $0. If they specified a lowest acceptable price that is too low, then the seller from the Ebay-like website may not accept it. Realize that if you specify a very low lowest price and the seller accepts it, then it can potentially mean that the laptop is of suspect quality and hence the seller agreed to sell it a low price. The lowest acceptable bid price you specify should such that you will not regret one bit if that specific price was not acceptable to the seller even though a slightly higher lowest price could have been acceptable to the seller)

> I found the available information on the opinions in the reviews, to be relevant in specifying the price range for the HP ARTIST laptop

Strongly   Strongly

Disagree   Disagree

    1   2   3   4   5   6   7

> I found the available information on the opinions in the reviews, to be very helpful in

specifying the price range for the HP ARTIST laptop

Strongly   Strongly

Disagree   Disagree

    1   2   3   4   5   6   7

>I specified the price range (i.e. maximum and minimum prices) for the HP Artist as if I

am very likely to purchase it

Strongly   Strongly

Disagree   Disagree

    1   2   3   4   5   6   7

> I specified the price range (i.e. maximum and minimum acceptable prices) for the HP

Artist, believing that purchasing it is the correct decision for me.

Strongly   Strongly

Disagree   Disagree

    1   2   3   4   5   6   7

> Given this situation, I believe that most people will find it easy to come up with their

maximum and minimum prices for the HP Artist laptop.

Strongly   Strongly

Disagree   Disagree

   1   2   3   4   5   6   7

> It took me a lot of mental effort, to come up with an acceptable price range (i.e.

maximum and minimum prices) for the HP Artist laptop (reverse coded)

Strongly   Strongly

Disagree   Disagree

   1   2   3   4   5   6   7

> When specifying the price range (i.e. the maximum and minimum prices), I

emphasized on how useful will the HP Artist laptop be as a comprehensive computing

equipment, rather than simply focusing on how useful is each of its individual features.

Strongly   Strongly

Disagree   Disagree

   1   2   3   4   5   6   7

> In coming up with the price range (i.e. the maximum and minimum prices), I

emphasized on the benefit of each individual feature in the HP Artist.

Strongly   Strongly

Disagree   Disagree

   1   2   3   4   5   6   7

Demographics

In order to help us further interpret your responses to the questionnaire, please answer the following questions about yourself:

> Your Gender (check one)

Male _____   Female _____

>Your Age

_____

>Your Race (check one)

African America_____

Caucsian_____

American Indian_____

Hispanic_____

Asian _____

Others (please specify)_____

>Were you raised in the United States? (check one)

Yes_____

No (If "No", please specify, where you were raised)_____

> Marital Status (check one)

Single_____

Married _____

Divorced_____

Widowed_____

> Are you currently employed? (check one)

Yes_____   No_____

> Household Size

_____

> Combined Annual Household Income Before Taxes (check one)

less than $20,000

$20,001 to $30,000

$30,001 to $40,000

$40,001 to $50,000

$50,001 to $60,000

$60,001 to $70,000

$70,001 to $80,000

$80,001 to $90,000

$90,001 to $100,000

More than $100,000

Your Name: _____

Your Email Address: _____

APPENDIX C

PART 2 STUDY 2 INSTRUMENT

The Part 1 study 2 instrument was implemented using Metacard software. The participants were provided the following instructions.

Instructions:

We would like to thank you for participating in this study. Please carefully read each question, and answer each question to the best of your ability. Try to fill the space provided for each open-ended answer. When responding to a 1 - 7 scaled question, please do so in a thoughtful manner. Some of the questions may be abstract. In that case, please answer them to the best of your ability. There is no time limit this study. You are free to work at your own pace and you may continue working on this section until you have completed responding to all questions in this questionnaire. Even if you finish responding to the questionnaire early, you will need to wait till the end of the entire session, as all participants in a session are allowed to leave only at the end of the entire session.

If you have any questions, OR if you are unable to understand any question in this questionnaire, please raise your hand, and the moderator will come to your seat and assist you.

We are interested in analyzing averages of people's responses to the questions, over a large group of people. As such, we want to assure you that your individual responses will be kept confidential.

After you complete this study, please raise your hand so that moderator can come to your desk, and get you started with the next study.

The following instructions will be created for priming subtractive framing.
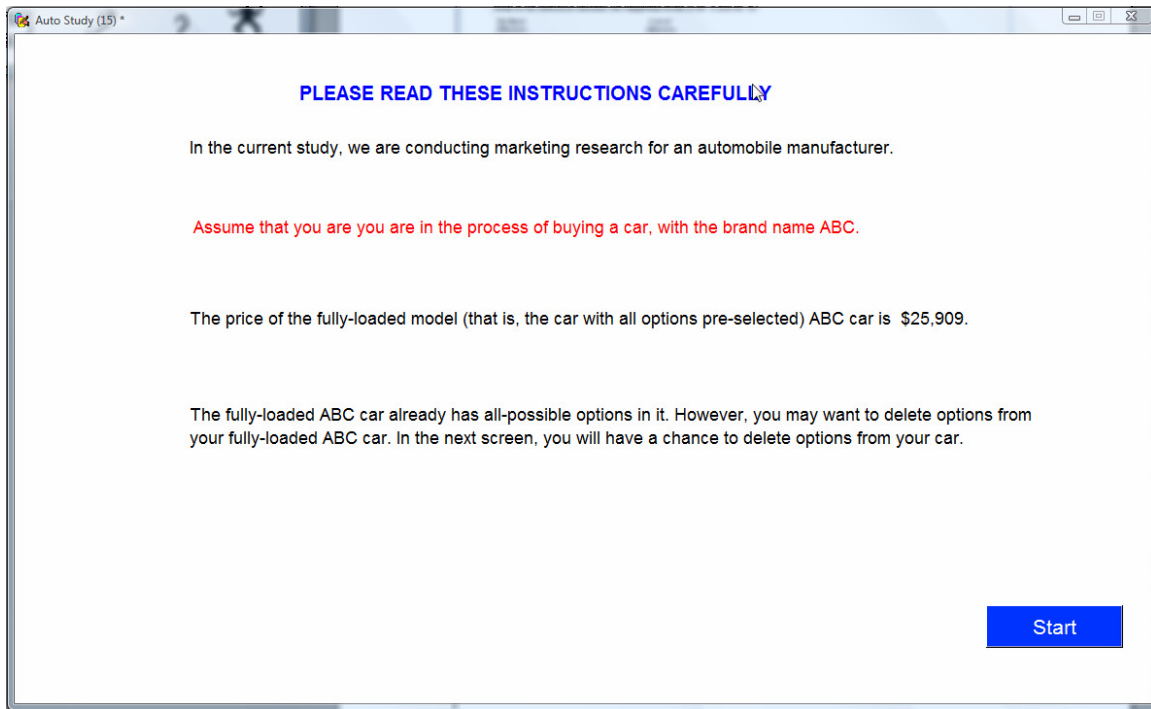
Figure 7
Automobile Study Introduction Screen

Participants were provided a means for deselecting the options that already exist in the fully-loaded model, by default.

Similar screens will also be created for priming additive framing.

After finalizing their choice of options, participants were then asked to respond to the following items:

>Given the options that you selected, roughly how much do you expect to pay for your ABC car (in dollars)?

> Overall, it was easy for me to make the option-choice decisions for my ABC car"

(reverse coded)

Strongly   Strongly

Disagree   Disagree

   1   2   3   4   5   6   7

> Given this situation, I believe that most people will have to think very hard, in finalizing

their choice of options, for the ABC car

Strongly   Strongly

Disagree   Disagree

   1   2   3   4   5   6   7

> The option choices that I finalized, represent ....

very little value   a lot of value

          1   2   3   4   5   6   7

> The options that I chose for my car, represent a poor choice." (reverse coded)

Strongly   Strongly

Disagree   Disagree

   1   2   3   4   5   6   7

> It was important for me to settle only on meaningful options in the car

Strongly   Strongly

Disagree   Disagree

1   2   3   4   5   6   7

> Overall, I am very satisfied with my final car, specifically in terms of choice of options

Strongly   Strongly

Disagree   Disagree

1   2   3   4   5   6   7

> Given the options that I ended up selecting, there is a high probability that I will buy the

ABC car

Strongly   Strongly

Disagree   Disagree

1   2   3   4   5   6   7

> Before committing to purchasing the ABC car, I am very likely to look for information

on other car manufacturers, if this were possible

Strongly   Strongly

Disagree   Disagree

1   2   3   4   5   6   7

> I am certain that buying the ABC car, with the options that I settled on, is the correct

decision for me

Strongly   Strongly

Disagree   Disagree

  1   2   3   4   5   6   7

> I am likely to recommend the ABC car, with the options that I selected, to a close friend

Strongly   Strongly

Disagree   Disagree

  1   2   3   4   5   6   7

> I found the task of choosing options for my car, to be enjoyable

Strongly   Strongly

Disagree   Disagree

  1   2   3   4   5   6   7

> I found the task of choosing options for my car, to be pleasant

Strongly   Strongly

Disagree   Disagree

  1   2   3   4   5   6   7

> I found the task of choosing options for my car, to be interesting

Strongly   Strongly

Disagree   Disagree

  1   2   3   4   5   6   7

Participants then responded to the 18-item Lockwood, Jordan and Kunda (2002) to

measure chronic regulatory focus. Finally, participants responded to demographic

questions, and then were debriefed.

APPENDIX D:

PART 3 STUDY 1 INSTRUMENT

This study was implemented using Metacard software. The instrument was laid out as follows:

We used multiple methods to prime regulatory focus, so as to reinforce the priming effect.

All the scales in the final scale will be 7 points scale, which seems to be the standard number of points used in most Regulatory focus research. I have just put in 9-points here in this draft, for convenience purposes.

Take a few minutes to review the following pictures of the Movado Men's Moderno (#0604230) watch:

Figure 8
Stimulus - Movado Moderno (#0604230) Watch

TO PRIME THE "OVERVALUED" CONDITION:

Assume that your father's birthday is coming up. Your father is a connoisseur (that is, an enthusiast) of Swiss watches. You are now planning on buying a birthday gift for your father. You check out the Movado Men's Moderno watch (#0604230) as a potential gift. However, as it turns out, this watch is no longer available at www.amazon.com, where this watch was priced at $295. Item prices on amazon.com are considered middle-of-the-road prices. The Movado is one of the most celebrated Swiss watch brands in the world. Traditionally, Swiss watches have been considered an elegant and celebrated gift item, and have been known to last decades, if properly cared for.

Now, assume that you are employed with a respectable engineering firm, as a project manager. It turns out that a new Movado Moderno men's watch (#0604230), which you

were targeting as a gift item for your father, is available on www.ebay.com. However, only one Movado (#0604230) is available for auction-sale on Ebay. As it turns out, this specific Movado (that is, #0604230) is not available in the local departmental and specialty stores in your area. You ask your mother about what might be a good price to bid for this watch on Ebay. Your mother informs you that the Movado has always been a watch, which your father wanted to buy. However, your father has refrained from buying a Movado for himself, given that he has been saving for your college education, for more than 15 years now.

Now that you are employed at a well-paying job, this might be a good time for you to buy something that your father has always wanted to have. This gift to your father is more than a gift. It is a statement of how much you value your father's sacrifices. To you this Movado is more than a regular watch. It is a way of showing your father that you do understand the sacrifices that he underwent in funding your education, and that you are now ready to stand up on your own feet, and fulfill some of your father's dreams.

Hence, if your father values this Movado, you value it even more. Also, this might as well be your last chance to get the Movado in time, for your father's birthday. You are not going to let go of this opportunity to get the Movado for your father, on his birthday, Hence, you decide to bid $395 (even though its traditional price is $295) on www.ebay.com for this Movado, so as to ensure that you indeed win this watch that is so valuable to you now.

TO PRIME THE "UNDERVALUED" CONDITION:

Assume that your birthday is coming up. You are a connoisseur (that is, an enthusiast) of Swiss watches. You are now planning on buying a birthday gift for yourself. You check out the Movado Men's Moderno watch (#0604230) as a treat for yourself on your birthday. However, as it turns out, this watch is no longer available at www.amazon.com, where this watch was priced at $295. Item prices on amazon.com are considered middle-of-the-road prices. The Movado is one of the most celebrated Swiss watch brands in the world and can last long if cared for. As it turns out, this Movado (#0604230) is available at a Macys in your area, but there it is priced at $314.99. However, it turns out that a new Movado Moderno men's watch (#0604230), which you were targeting, is available on www.ebay.com. However, only one Movado (#0604230) is available for auction-sale on Ebay.

Now, assume that you will be completing your undergraduate studies soon, and that you have been searching for a job. However, given the current dire situation with the economy, you do not foresee getting a solid-stable job. Given this, you decide that it may not be worth bidding a high price on the Movado (#0604230) auction on Ebay.com. You don't want to let go of this opportunity to own a Movado, however. You want to buy this Movado only if you can pay a substantially lower price to acquire it. For you, the current market value of $295 is actually a higher price than is worth paying for this watch.

Hence, you will be able to value and to justify buying this Movado, only if you can acquire it at a substantial discount. You are going to use this opportunity on Ebay, to try to win the Movado (#0604230) at a substantially lower price. You will be bidding a lower-than-market bid price on the Movado. Hence, you decide to bid only $195 on Ebay, on the Movado (#0604230) auction.

> I focused mainly on why overvaluing the Movado, when submitting my bid on Ebay, is the right decision for me" ("overvaluation focus" item)

Strongly						Strongly
Disagree						Agree
1	2	3	4	5	6	7

>I focused mainly on why undervaluing the Movado, when submitting my bid on Ebay, is the right decision for me" ("undervaluation focus" item)

Strongly						Strongly
Disagree						Agree
1	2	3	4	5	6	7

The following 25-item Behavior Identification Form (BIF) scale (Vallacher and Wegner 1989) will be administered. The BIF scale is the defacto scale used to check whether participants' construal is at a high level or at a low level. Coding of participants' responses on the BIF questionnaire will be binary (high-level construal = 1, low level construal = 0), and each participant's response across the 25 items will be summed to provide a BIF scale.

The Behavior Identification Form

Item	M	Item-total r	Item	M	Item-total r
1. Making a list a. Getting organized[a] b. Writing things down	0.73	.30	14. Climbing a tree a. Getting a good view[a] b. Holding on to branches	0.40	.37
2. Reading a. Following lines of print b. Gaining knowledge[a]	0.87	.29	15. Filling out a personality test a. Answering questions b. Revealing what you're like[a]	0.69	.31
3. Joining the Army a. Helping the Nation's defense[a] b. Signing up	0.47	.39	16. Toothbrushing a. Preventing tooth decay[a] b. Moving a brush around in one's mouth	0.79	.41
4. Washing clothes a. Removing odors from clothes[a] b. Putting clothes into the machine	0.57	.34	17. Taking a test a. Answering questions b. Showing one's knowledge[a]	0.53	.35
5. Picking an apple a. Getting something to eat[a] b. Pulling an apple off a branch	0.62	.31	18. Greeting someone a. Saying hello b. Showing friendliness[a]	0.74	.35
6. Chopping down a tree a. Wielding an axe b. Getting firewood[a]	0.61	.33	19. Resisting temptation a. Saying "no" b. Showing moral courage[a]	0.48	.34
7. Measuring a room for carpeting a. Getting ready to remodel[a] b. Using a yardstick	0.70	.38	20. Eating a. Getting nutrition[a] b. Chewing and swallowing	0.59	.43
8. Cleaning the house a. Showing one's cleanliness[a] b. Vacuuming the floor	0.60	.37	21. Growing a garden a. Planting seeds b. Getting fresh vegetables[a]	0.65	.32
9. Painting a room a. Applying brush strokes b. Making the room look fresh[a]	0.65	.41	22. Traveling by car a. Following a map b. Seeing countryside[a]	0.78	.30
10. Paying the rent a. Maintaining a place to live[a] b. Writing a check	0.65	.48	23. Having a cavity filled a. Protecting your teeth[a] b. Going to the dentist	0.47	.41
11. Caring for houseplants a. Watering plants b. Making the room look nice[a]	0.40	.35	24. Talking to a child a. Teaching a child something[a] b. Using simple words	0.66	.32
12. Locking a door a. Putting a key in the lock b. Securing the house[a]	0.89	.31	25. Pushing a doorbell a. Moving a finger b. Seeing if someone's home[a]	0.92	.28
13. Voting a. Influencing the election[a] b. Marking a ballot	0.66	.34			

Note. M is proportion of higher-level responses.
[a] Higher-level alternative.

Figure 9
BIF Items

Next, we will be displaying you some shapes. You should focus on the shape on the top, in the middle. You will also see two different shape on the bottom, one on the left, and the other on the right.

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Based on your first instinct (i.e., without spending too much time thinking about it),

please judge whether the shape in the bottom-left OR the shape in the bottom-right, is

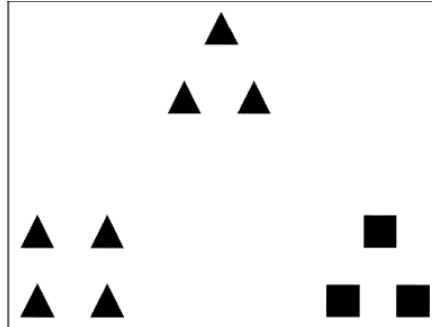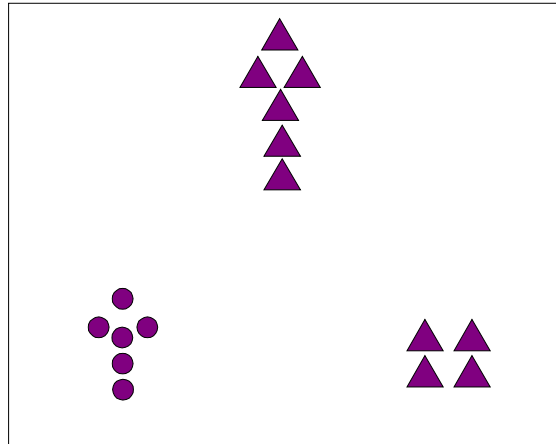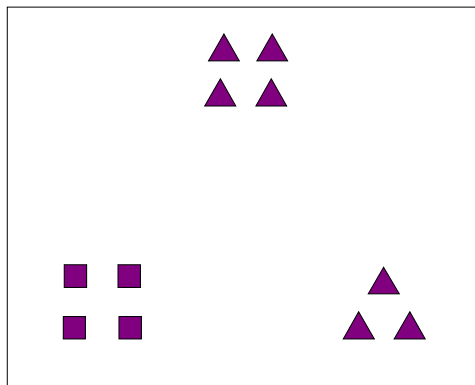MORE SIMILAR to the original shape in the top-middle.

Figure 10
Navon-Task Figure 1

The figure on the top in the center is more similar to which of the two figures on the

bottom half.

  A> more similar to the figure on the bottom left

  B> more similar to the figure on the bottom right
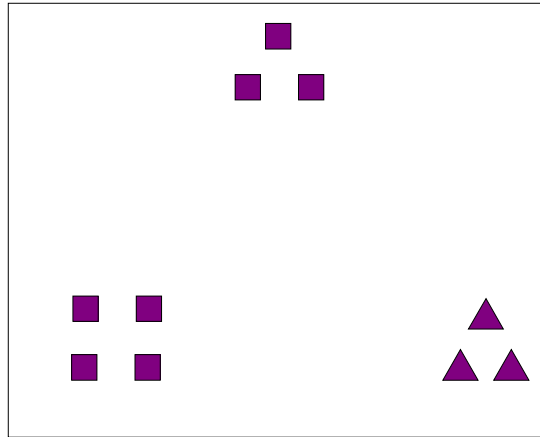
Figure 11
Navon-Task Figure 2

The figure on the top in the center is more similar to which of the two figures on the

bottom half.

   A> more similar to the figure on the bottom left

   B> more similar to the figure on the bottom right

Figure 12
Navon-Task Figure 3

The figure on the top in the center is more similar to which of the two figures on the

bottom half.

   A> more similar to the figure on the bottom left
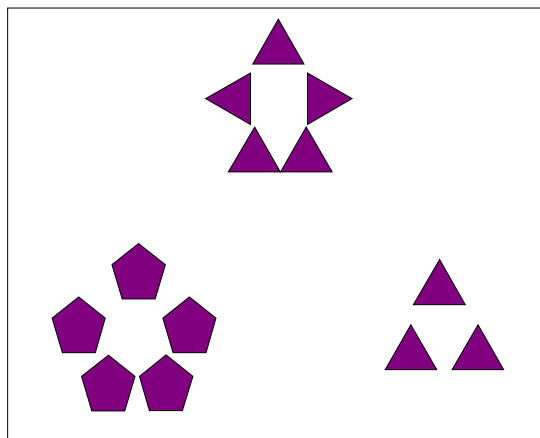
   B> more similar to the figure on the bottom right

Figure 13
Navon-Task Figure 4

The figure on the top in the center is more similar to which of the two figures on the

bottom half.

A> more similar to the figure on the bottom left

B> more similar to the figure on the bottom right

Figure 14
Navon-Task Figure 5

The figure on the top in the center is more similar to which of the two figures on the

bottom half.

A> more similar to the figure on the bottom left
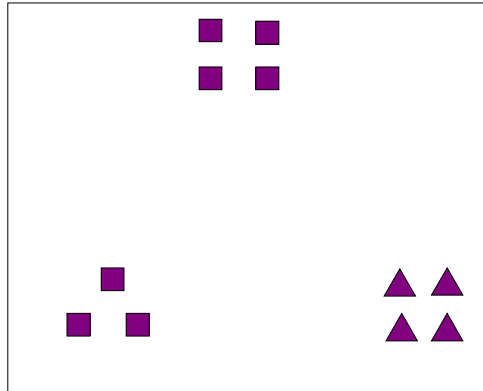
B> more similar to the figure on the bottom right

Figure 15
Navon-Task Figure 6

The figure on the top in the center is more similar to which of the two figures on the bottom half.

    A> more similar to the figure on the bottom left

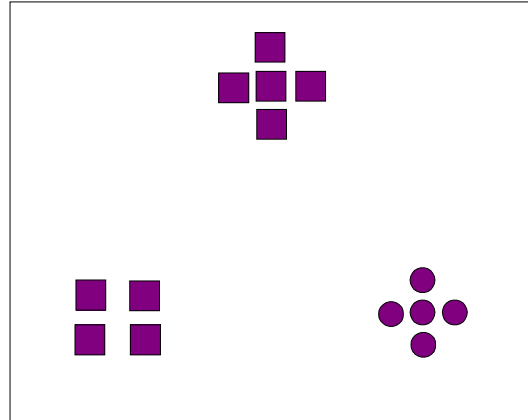   B> more similar to the figure on the bottom right

Figure 16
Navon-Task Figure 7

The figure on the top in the center is more similar to which of the two figures on the bottom half.

    A> more similar to the figure on the bottom left

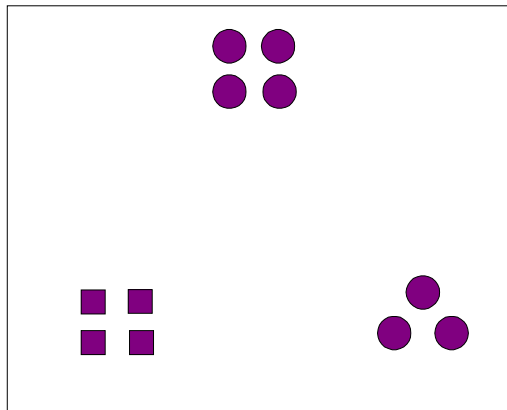   B> more similar to the figure on the bottom right

Figure 17
Navon-Task Figure 8

The figure on the top in the center is more similar to which of the two figures on the

bottom half.

    A> more similar to the figure on the bottom left

    B> more similar to the figure on the bottom right

> I focused mainly on why overvaluing the Movado, when submitting my bid on Ebay, is

the right decision for me" ("overvaluation focus" item)

Strongly   Strongly

Disagree   Agree

   1   2   3   4   5   6   7

> In justifying my final bid price for the Movado watch, I focused on what I would LOSE

by not winning the Movado (loss focus item)

Strongly   Strongly

Disagree   Agree

   1   2   3   4   5   6   7

Participants then responded to the 18-item Lockwood, Jordan and Kunda (2002) to

measure chronic regulatory focus. Finally, participants responded to demographic

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