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Consumer Evaluation: Describing Construal-Level Theory and a Role of Emotion on Human's Thinking Processing Style

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LOYOLA UNIVERSITY CHICAGO

CONSUMER EVALUATION:

DESCRIBING CONSTRUAL-LEVEL THEORY AND A ROLE OF EMOTION ON HUMANS'

THINKING PROCESSING STYLE

A THESIS SUBMITTED TO

THE FACULTY OF THE GRADUATE SCHOOL

IN CANDIDACY FOR THE DEGREE OF

MASTER OF ARTS

PROGRAM IN APPLIED SOCIAL PSYCHOLOGY

BY

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ABSTRACT

Based on emotion and construal level theory, this study examined the influence of emotion on consumer decision-making. Participants were induced into happy or sad moods by describing a past happy or sad life event. Then they were asked to read one of two smartphone advertisements. One advertisement emphasized only central features of smartphone, and the other one emphasized only secondary features. The dependent variables were participants' attitudes toward the advertisements, purchase intention of the smartphone in the advertisement, and willingness to pay for the smartphone. Based on the connection between emotion and construal level, I predicted that due to their abstract construal happy participants would prefer advertisement emphasizing central features of the smartphone. By contrast, I predicted that due to their more concrete construal sad participants would prefer the advertisement emphasizing secondary features of the smartphone. Results supported the prediction that mood and advertisement emphasis would interactively predict participants' attitudes toward the smartphones. However, predictions regarding purchase intention, though in the predicted direction, failed to achieve standard levels of statistical significance. Lastly, results of willingness to pay failed to confirm expectations. Implications of this work for consumer decision-making and emotion are discussed.

CHAPTER ONE

INTRODUCTION

Life is a series of decisions. In the past, the mental process of decision-making was regarded as rational and people were assumed to be focused on optimizing utility (Immanuel, 1991). However, over the past several decades, researchers started to pay attention to the role of emotion in decision-making. Many studies have demonstrated that emotion influences human's judgment and decisions. Thus, emotion is not just an outcome of a certain decision, as when we regret purchasing that stuffed armadillo, but also can be a cause. Emotion or mood indicates the condition of our circumstances and serves an informative function (Bollnow, 1956; Schwarz & Clore, 1983). For example, according to the affect-as-information approach affective feelings may influence decisions directly by providing information about liking and they may influence decisions indirectly by providing information about currently accessible styles of information processing (Schwarz & Clore, 1983, 1988, 1996). The objective of this study is to investigate the influence of emotion on consumer's attitude and judgment.

In this study I hypothesize that emotion influences consumer's attitude and judgment indirectly by producing differences in styles of thinking. Specifically, I predict that happy affect will lead to abstract thinking and a focus on central or main features of a product, and sad affect will lead to concrete thinking and a focus on secondary or

minor features of a product. Thus, people in happy moods should evaluate products introduced in advertisements with strong central features more positively than those introduced in advertisements emphasizing strong secondary features. People in sad moods should evaluate products advertised with strong secondary features more positively than those advertised with strong central features.

In what follows I first review past research on consumer attitudes and product evaluation with an emphasis on studies demonstrating how styles of thinking (e.g., abstract versus concrete) influence attitudes and evaluation. I then review research demonstrating a connection between feeling a particular way (e.g., positive or negative mood) and thinking a particular way (e.g., abstract vs. concrete). Finally, I report results of this study and conclude this thesis by touching on future research and limitations of this study.

Thinking Styles and Product Evaluation

From a marketing perspective, marketers try to create positive attitudes toward their products when developing advertisements, because the positive attitudes tend to lead to an actual purchase. An attitude toward a product or service represents the way in which a consumer thinks, feels, and reacts with respect to the product or service. An important question is what factors are important to make a positive attitude towards a product. People do not rely only on functional attributes of a product when forming an attitude toward a product. Consumers' attitudes toward a product can be formed differently depending on various attributes such as price, design, and situation. For

example, Shapiro (1968) emphasizes the importance of price and he argues that consumers are more likely to stress a product's price more than any other attributes. Brand equity, what consumers perceive as the product or service value from the brand name, instead of the product or service itself, is also an influential attribute. For instance, consumers are more likely to choose brands having higher brand equity (Cobb-Walgren, Ruble, & Donthu, 1995). This example shows that cognitive components, e.g., beliefs about a product, play an important role to motivate consumers to buy the product. In contrast to the previous examples, indirect cues, which are not related to the products or brands, also contribute to attitudes toward a product and determine people's purchase intentions. That is, consumers are influenced not only by a product itself but also by intrapersonal factors, and sometimes the latter factors have a stronger effect than the former. Among the indirect cues, some studies have shown that people's thinking styles (e.g., abstract versus concrete) and emotions result in different preferences and evaluations for products.

Even though people watch the same advertisement, their feelings or opinions toward the advertisement are not necessarily same. When processing information, some people may think abstractly, whereas others may think more concretely. Thinking abstractly means that people focus on the essence of events or behaviors (Watkins, Moberly, & Moulds, 2008), and necessary features are not varied across circumstances (Watkins et al., 2008; Shapira, Liberman, Trope, & Rim, 2012; Burgoon, Henderson & Markman, 2013). People who think abstractly make a decision efficiently after

considering some crucial information rather than considering all information. On the other hand, thinking concretely means that people focus on the various details rather than the essences. Thus, when thinking concretely, people consider specific information as much as possible and make a decision after considering them.

A variety of factors have been found to determine whether people think abstractly or concretely. One such factor, according to Construal Level Theory (CLT; Liberman, & Trope, 2010), is psychological distance. According to CLT, people think and interpret an object or event more abstractly (a high-level construal) when the object or event is far from themselves spatially, temporally and psychologically. On the contrary, people tend to interpret an object or event concretely (a low-level construal) when the object or event is close to themselves (Liberman, & Trope, 2010). Construal Level Theory suggests that the high-level construal of outcomes yields primary and goal-relevant characteristics of outcomes (Liberman. & Trope, 2010). On the contrary, the low-level construal of outcomes yields secondary and goal-unrelated characteristics of outcome. Therefore, the more distance there is between a person and an object, the more people think abstractly and consequently concentrate on goal-relevant and primary characteristics of an object. The less distance there is between the two, the more people construe concretely and accordingly concentrate on goal-irrelevant and secondary characteristics of an object.

This effect of construal level on product evaluation, in this case a cell phone, can be seen in research by (Martin, Gnoth, & Strong, 2009). In this research temporal

construal was manipulated by varying the availability of the cell phone. In the distant construal condition the cell phone would be available in a few months and in the near construal condition the cell phone would be available in the next few days. The content of the advertisement was manipulated such that it emphasized primary characteristics of the cell phone (e.g., the phone is lightweight, has a long battery, etc.) or emphasized secondary characteristics of the cell phone (e.g., choice of many colors, calendar feature, etc.). The main outcome was participants' attitudes toward the advertisement. Consistent with construal level theory, participants in the distant construal condition liked the advertisement emphasizing central characteristics of the cell phone more than those in the near construal condition. This pattern was reversed when the advertisement emphasized secondary characteristics of the cell phone. Now participants in the near construal condition liked the advertisement more than those in the distant construal condition.

A similar influence of construal level can be seen in research by Trope & Liberman (2000), which showed that people's preferences toward products are affected by whether they are thinking abstractly or concretely. Tendencies to think abstractly or concretely were manipulated by having participants imagine buying a radio sometime in the distant future (abstract condition) or in the near future (concrete condition). People in the former category evaluated the product with an outstanding central feature (sound quality) and a worse secondary feature (clock on the radio) more positively. Conversely, people in the latter category evaluated a product with an outstanding

secondary feature (clock on the radio) and a worse central feature (sound quality) more positively. A similar effect of abstract versus concrete thinking on evaluations can be seen in research investigating students' ratings of college courses (Fujita, Eyal, Chaiken, Trope, & Liberman, 2008). Four psychology courses with almost the same length and depth of explanation were described with six remarks. All of these remarks were endorsed positively by students who had taken this class before. Two of the courses were presented with more high-level remarks (4 of 6 remarks) and few low-level remarks (secondary and concrete features of the course) (2 of 6), on the other hand, the other two courses were introduced with more low-level remarks (4 of 6) and few high-level remarks (primary and abstract features of the course) (2 of 6). In this research, students who believed that a course would be held in the far future (next academic year) tended to rate positively the classes that were described with more high-level remarks. By contrast, the attitudes of students who believed it would be held in the near future (next semester) did not differ depending on the kinds of course endorsing remarks (high-level versus low-level).

Emotion and Thinking Styles

Emotion may influence product evaluations either directly through its influence on liking, or indirectly through its influence on thinking styles. When making judgments people often consult their current affective reactions, using what has been called the "How do I feel about it?" heuristic (Schwarz & Clore, 1988). Such affective consultations often lead to mood congruency effects. People who are in a happy mood tend to

evaluate objects more favorably than people who are in a sad mood (Gardner, 1985; Isen, Shalcker, Clark, & Karp, 1978).

A similar direct effect can be seen in research on mood consistency effects, which refer to the tendency to prefer mood-consistent products. Kamins, Marks, & Skinner, (1991) showed such mood consistent preferences on judgment of commercials. Participants in this work who watched a happy TV program preferred happy commercials, while people who watched a sad TV program did not to such an extent. The authors accounted for the fact that people in a sad mood preferred sad commercials to happy commercials because the sad commercial is consistent with their sad feeling, and people in a positive mood preferred happy commercials to sad commercials because of the visible consistency with their emotions. People in a negative mood do not always evaluate and think negatively. As opposed to the mood congruency effect, if the stimulus is consistent with people's current feelings, they will consider those stimuli favorably. In other words, people in happy and sad moods prefer commercials that match their current mood more than those that mismatch their mood.

This research shows that mood directly determines consumers' evaluation and preference. However, of more interest is research showing that consumers' evaluations are also indirectly affected by their mood. In other words, mood indirectly influences humans' judgment, behavior, and evaluation by directing people's thinking styles, rather than directly influencing evaluation by serving as information about liking and disliking.

One way to understand how emotions and moods influence styles of processing is that they indicate the condition of our circumstance, and therefore they provide us with important information or feedback (Bollnow, 1956). According to the affect-as-information approach (Schwarz & Clore, 1983, 1988, 1996), affective feelings play a role as information influencing human's thinking processing and judgment. This approach asserts that bad moods signal a problematic situation, whereas positive moods signal a benign situation. Depending on current affective feelings and reflected situations, people are motivated to think in different ways. People in a sad mood are motivated to think systematically by focusing on the details, as doing so will help them deal with problems in the surrounding environment. On the contrary, people in a happy mood are motivated to depend on the broad knowledge structures rather than detailed ones and think abstractly, because they found no problems in a given situation, and everything seems favorable.

A variety of articles support the affect-as-information approach (for a review, see Huntsinger, Clore, & Isbell, 2014). Other research also shows that humans use different information depending on their affective feelings (Clore, Gasper, & Garvin, 2001; Clore, Wyer, Dienes, Gasper, Gohm, & Isbell, 2001; Wyer, Clore, & Isbell, 1999). When people recall what they saw and reproduce a face image which they have seen, people in a happy mood recall global information such as titles and face features more than people in a sad mood (Gasper, & Clore, 2002). This result shows that when recalling information, happy people are more likely to use and depend on global,

schematic information than sad people. Beukeboom, & Semin (2005) demonstrate that mood makes people describe what they are told using at different levels of abstraction. When retelling a story, participants in positive moods use more abstract language (e.g., why something happened, the big picture), whereas participants in a negative mood use more concrete language (e.g., how something happened, the details).

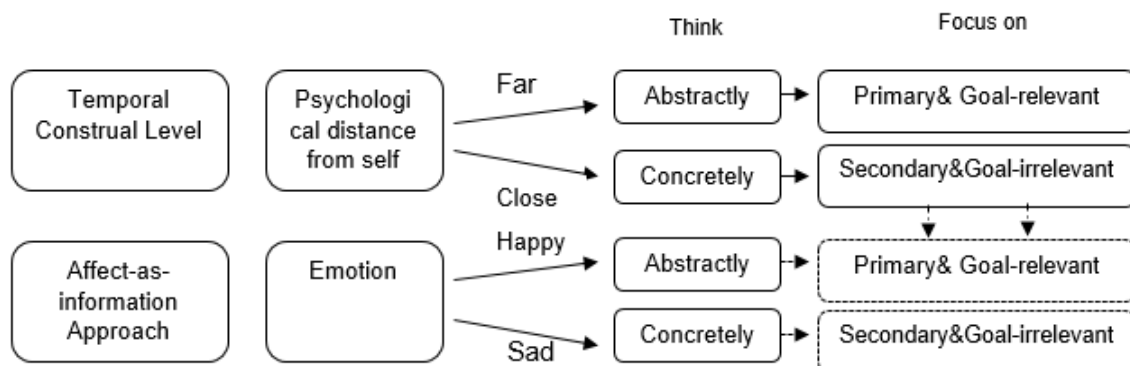
Although a great deal of research shows a connection between emotion and thinking styles, little research has examined how such differences in thinking style influence consumer attitudes and product evaluations. One exception is research by Labroo and Patrick (2009). In their experiment, participants in a positive mood were more persuaded by an abstract advertisement and they expressed higher purchase intention after viewing the advertisement than participants in a negative mood. Yet, participants in a negative mood were more persuaded by products that framed immediate and concrete benefits and showed higher purchase intentions after viewing the concrete advertisement. The Labroo and Patrick (2009) work, thus, examined the relationship between emotion and overall tone of an advertisement, but did not address whether mood might make people more or less likely to be influenced by an emphasis on certain product features, such as those central or secondary to the product's purpose.

My research is focused on the latter question. Specifically, I will examine whether experiencing a particular emotion makes people place greater emphasis on certain features of a product (e.g., central versus secondary features).

The Proposed Research

I predict that, similar to research inspired by construal level theory, positive and negative affect will influence product evaluation via its influence on styles of thinking (see Figure 1). Specifically, like far psychological distance, happy mood will trigger abstract thinking and therefore a focus on central features of a product. Conversely, like close psychological distance, sad mood will trigger concrete thinking and therefore a focus on secondary features of a product. As a result, when products are introduced with strong central features in advertisements, happy people will be more likely to evaluate the products positively. Sad people, by contrast, should be likely to evaluate products in advertisements emphasizing strong secondary features more positively than products in advertisements highlighting strong central features of the products (for a similar influence of mood on abstract versus secondary thinking in the domain of impression formation, see Isbell, 2004).

Figure 1. Expected Relationship between Mood and Cognitive Thinking Style



To examine the impact of emotion on consumer attitude about advertisements,

participants were asked to write a story, either happy or sad, which helped to manipulate their mood. Then, participants read one of two advertisements about a smartphone. The reason that I chose a smartphone as the product is that a smartphone is an item that almost all people use every day, regardless of sex and age. To minimize any effects of brand familiarity, I removed all logo or brand information from the smartphone image. The central advertisement consisted of primary information such as storage and battery life. The secondary advertisement consisted of secondary information about the smartphone such as a variety of ring tones and some utilities like calculator or voice memos. After reading the advertisement, participants completed several questions about the smartphone. A first question examined whether participants' mood would influence whether they rated central or secondary advertisements more positively. The next set of questions examined participants' intention to buy the smartphone and how much money they were willing to pay for the smartphone. The primary prediction was that participants in positive moods would more positively rate the advertisement emphasizing central features of the product than those in negative moods. This pattern was predicted to reverse for the advertisement emphasizing secondary features, such that participants in negative moods would more positively rate the advertisement than those in positive moods. A similar pattern of results was expected for the measures of purchase intentions and money spent to purchase the smartphone.

CHAPTER TWO

METHODS

Participants, Design and Overview.

This study was conducted in Loyola University Chicago and online using Amazon Mechanical Turk. For the pilot study, 20 students in Loyola University Chicago participated (see presentation of advertisement section for details). For the main study, I recruited participants through Amazon's MTURK. Subjects for the study were people who were at least 18 years of age. Four hundred and eighty two people recruited from Amazon's MTURK participated in this study. Participants were randomly assigned to a 2 (mood: happy or sad) X 2 (attribute importance: primary or secondary) between-subjects factorial design. Due to vagaries of random assignment the number of participants per condition ranged from 51 to 99. They were asked to recall their happy or sad story and write the story (please see mood induction part for more details). Then, participants read one of two advertisements, then, they were asked several questions related to their mood, the advertisement, and general demographic information. Among these questions, one attention check question was included. I added this question to exclude participants who did not pay attention during this study, so that I could improve the quality of data. At the end of the study, participants were debriefed and thanked for their participation. The entire experiment was conducted on

a computer.

Mood Induction

For the mood induction task, participants were asked to write a vivid story of a happy or sad life event, ostensibly to help construct a “Life Event Inventory” (Schwarz & Clore, 1983). I expected that writing a happy story would induce a happy mood in participants, whereas it was expected that writing sad story would induce a sad mood in participants. Participants were asked to spend 8-10 minutes on the writing task. They were also asked to describe their story in detail and as vividly as possible. At the end of the experiment, participants completed several questions to check on the efficacy of the mood induction. Among those questions, there were two questions for the mood manipulation check. The questions are as follows: “How happy or sad did you feel after recalling the event for the Life Events Inventory?” and “How do you feel right now?” All responses were made on seven rating scales ranging from 1 (very sad) to 7 (very good).

Presentation of Advertisement

After participants completed the mood induction task, participants were asked to view an advertisement for a smartphone. Instructions indicated that they should view the advertisement carefully and in detail. As mentioned above, I varied whether the advertisement copy emphasized primary or secondary features of the smartphone (Martin et al., 2009; see also Maheswaran, Durairaj, Mackie, & Chaiken, 1992; Martin, Brett, Lang, & Wong, 2004). Following past research (Martin et al., 2009) each advertisement described five features of smartphone, and all described features had

positive valence. I conducted a pilot study prior to conducting the main study to be certain that the features would indeed be judged differently. In this study (N=20), I provided participants with 18 attributes related to smartphones, and largely drawn from past research (e.g., Martin et al., 2009). Participants were asked to rate those attributes on a seven-point scale (1: not at all important, 7: very important). I chose five attributes rated most highly and used them for the advertisement emphasizing primary attributes of smartphone. On the other hand, five items rated most lowly were described in the advertisement emphasizing secondary attributes. Also, to ensure that the attributes are similar in valence, the participants also rated the positivity of the attributes (1: very negative, 7: very positive), and only attributes that had similar in positive valence were selected for each advertisement. In other words, all attributes that were selected for each advertisement had similar positive valence.

Rating

After participants viewed the advertisement, participants completed several questions about the advertisement and smartphone. Some questions about the smartphone were filler questions (e.g. “How much are you interested in the smartphone?” “How long have you been using the smartphone?”). The first focal question asked participants about their attitudes toward the advertisement. Following past research (Martin et al., 2009) participants were asked to indicate how much they liked the advertisement they had just viewed, using a Likert scale (1: not at all, 7: really like this advertisement). Next question concerned participant’s intention to buy the

smartphone in the advertisement (1: I don't want to buy this smartphone, 7: I really want to buy this smartphone). Finally, participants were asked the following question, "How much will you be willing to pay for the smartphone maximally?" The price was defined at seven levels (P1: \$100~200, P2: \$200~300, P3: \$300~400, P4:400~500, P5: \$500~600, P6: \$600~700, P7: \$700~800).

Data Cleaning

Online data collection has some limits compared to research conducted in a laboratory. Since researchers cannot as easily regulate participants' focus during online experiment and important aspects of the experimental environment are out of the researcher's control, data collected online might often be noisier than that collected in the laboratory. In order to overcome this problem effectively and improve the quality of data, the process of data cleaning was performed with conditions described below. The first exclusion was data from participants who had participated more than two times or failed to provide an accurate answer to the attention check question.

The second exclusion was the amount of time participants took to read the advertisement. Because the advertisement is one of the main manipulations in this experiment, it is imperative that participants took a reasonable amount of time to read the advertisement. Thus, although participants were instructed to read the advertisement carefully, one cannot guarantee that all participants read the advertisement carefully in an online setting (or, really, in a laboratory setting). Therefore, I decided to exclude people who read the advertisement superficially, in this

case a 20 percent cut point was used as a criteria. Since the 20 percentile value was 5.719 seconds, the data of people who had read the advertisement for less than 5.719 seconds were excluded.¹

The last exclusion is related to the mood manipulation. A precondition for testing the focal hypothesis was that the two groups differed in mood. And, as we are testing the effect of mood on advertisement evaluation, rather than the effectiveness of the mood induction per se, participants whose mood was not effectively manipulated were excluded from analyses below (for a similar method, see Bower et al., 1978; Storbeck & Clore, 2005). Specifically participants were included only if their answer to the manipulation check question was higher than two points below the mean in the happy condition and less than two points above the mean in the sad condition. All results are analyzed with the data that met all of the above conditions. However, I do report main results with and without the mood manipulation exclusion for the interested reader.

Overall, these exclusion together required removal of 146 number of participants (or 30%), leaving a final sample of 336 participants. The exclusion of this percentage of participants is consistent with other experimental work using online samples, including those from Amazon's Mechanical Turk (see Buhrmester et al., 2011 for a discussion).

¹ These effects are robust to different percentile cutoffs. For example, applying a cutoff five percentage points below (i.e., 15%) and five percentage points above (i.e., 25%) that used here does not materially influence the results. In both cases, the interaction pattern remains the same and the significance of this interaction only slightly changes (for the 15% cutoff, $p=.1$, and for the 25% cutoff, $p=.039$).

CHAPTER THREE

RESULTS

Pilot Study Results

From the pilot study discussed above, five representative features were selected for each advertisement. For the central features, price, storage, long hour stand by time, camera function, and touch sensor got highest scores. On the other hand, secondary features that received lowest scores are as follows: various font style, built-in diverse ringtones, diverse accessories, audio recording functions, color choice, and various built-in apps. None of the features were rated negatively (please see Table 1 in Appendix for detailed results).

Mood Manipulation Check Results

To examine whether the mood manipulation was successful, participants' responses to the mood checks were analyzed using a one-way analysis of variance (ANOVA). Through the analysis, significant main effects of participants' moods were found. First, participants who wrote a happy event felt much happier right after recalling the event ($M = 6.35$, $SD = .820$) than ones who wrote a sad event ($M = 1.94$, $SD = .937$), $F(1, 334) = 2056.10$, $p < .001$. Similarly, in the end of the experiments, participants who recalled a happy event still rated their mood as more happy ($M = 5.83$,

$SD = .99$) than the participants who recalled a sad event ($M = 3.02, SD = 1.16$). The ANOVA showed that this difference was significant, $F(1,334) = 549.82, p < .001$. That is, writing happy events successfully made participants feel happy, and writing sad events made participants feel sad.

Advertisement Questionnaire Results

Attitudes toward Advertisements

I expected to find that happy participants would prefer the advertisement highlighting central features of a smartphone to the advertisement highlighting secondary features, and that sad participants would prefer the advertisement highlighting secondary features over the advertisement highlighting central features. This prediction was tested by submitting the attitude measure to a 2 x 2 ANOVA. The interaction effect between moods and types of advertisements was significant, $F(1, 332) = 4.44, p = .036$. Neither main effect reached significance, $F_s < .5$. Participants in the happy group rated the central advertisement more favorably ($M = 4.24, SD = .23$) to the secondary advertisement ($M = 3.71, SD = .16$), $t(332) = 1.90, p = .058$. Participants in the sad group rated the secondary advertisement more favorably ($M = 3.89, SD = .17$) than the central one ($M = 3.64, SD = .10$); however this difference was not significant, $t(332) = 1.02, p = .31$.

The choice to exclude participants whose mood was not effectively manipulated, though standard practice in past research (e.g., Bower et al., 1978; Storbeck & Clore, 2005), does introduce potential confounds as it breaks random assignment. Therefore, I

re-ran analyses without this exclusion criteria. The key interaction effect was reduced somewhat, $F(1, 340)=3.36, p=.06$, but the overall pattern of means was virtually identical to that reported above.

Intention to Purchase

The measure of intention to purchase was submitted to the same ANOVA. In contrast to the result of attitudes toward advertisements, participants did not significantly differ in intention to purchase the smartphone in the advertisements, $F(1, 332) = 1.10, p = .30$. Even though the interaction effect between moods and type of advertisement was not significant, the pattern of means was in the predicted direction. That is, participants in the happy condition formed a greater purchase intention of the smartphone in the central advertisement ($M = 4.02, SD = .26$) than one in the secondary advertisement ($M = 3.55, SD = .19$). On the other hand, participants in the sad group formed almost similar purchase intention of the product in the central ($M=3.77, SD=.19$) and secondary ($M=3.73, SD=.19$) advertisement. Neither main effect reached significance, $F_s < .9$.

Willingness to Pay

The measure of willingness to pay was submitted to the same ANOVA. As mentioned above, I expected that happy people would be willing to pay more to a smartphone in the advertisement with central features than a smartphone in the advertisement with secondary features, and sad people would follow the reverse pattern. The predicted interaction was not observed, $F(1, 332) = .50, p = .48$. Happy

and sad participants offered similar amounts of money for the smartphone across both central (happy: $M=2.06$, $SD=.16$; sad: $M=2.02$, $SD=.12$) and secondary (happy: $M=2.04$, $SD=.11$; sad: $M=1.82$, $SD=.12$) advertisements. Like the other results mentioned above, the main effects were proved as not significance, $F_s < .4$.

CHAPTER FOUR

DISCUSSION

This study investigated the interactive role of positive and negative affect and emphasis on central or secondary product features on people's attitudes toward a smartphone advertisement, intentions to purchase the smartphone, and willingness to pay for the smartphone. Consistently with predictions, results revealed that people prefer different types of advertisement depending on their moods. The study demonstrated that happy people preferred the smartphone advertisement emphasizing central features such as large storage and long battery life. Conversely, sad people preferred the advertisement with secondary features such as various color choices and ring tones. Similarly, although not reaching conventional levels of significance, results also revealed that purchase intentions of happy people and sad people differed depending on whether central or secondary product features were highlighted. Happy people were more likely to be interested in the smartphone advertised with central features, however, sad people were similarly interested in both smartphones regardless of the features emphasized in the advertisements. Finally, a third question concerned a product's price information. The last question revealed that people were not influenced by their moods when they made a judgment about a product's price.

Results for attitudes toward advertisements were in line with predictions, however, results for intention to purchase, though following the same pattern, were not significant. Yet, the results for the willingness to pay measure did not produce a similar pattern. There are several reasons why this might be the case. One reason may be how participants approach each question, in particular how much mood may be used as a source of information. In other words, participants might have gathered more pieces of information to decide how much they could pay for the smartphone. Liking does not always result in purchasing. Since purchasing decisions are directly linked to money, it seems that people became more rational by comparing and evaluating multiple attributes of the smartphone rather than depending on their moods. Therefore, those pieces of information seemed to lead the results for the willingness to pay measure away from what the participants actually liked. This possible explanation should be investigated and addressed in future studies.

A limitation of this study is the lack of sufficient steps for mood manipulation. This study manipulated happy or sad mood by instructing participants to write their happy or sad events. Even though writing life events was shown to be effective enough to induce a certain mood (Schwarz & Clore, 1983), this study might have found more robust results if more kinds of mood induction tasks, such as listening to happy or sad music (Huntsinger, 2011), were added.

Another limitation is related to the smartphone image shown in this experiment. In order to avoid brand effects, I tried to find a smartphone image that people cannot

recognize the brand of the smartphone; however, there is a chance that participants identified the brand of the smartphone in advertisements and completed the survey based on their preferences for the brand.

This research examined only two kinds of moods which are happy mood and sad mood. It would be interesting in future research to examine the role of different emotions in the processes explored here. Anger and anxiety might be good examples to be explored. Anger tends to elicit top-down processing and leads people to see the forest rather than trees like a happy mood (Isbell, McCabe, Burns, & Lair, 2013), conversely, anxiety is known to cause people to focus on details (Basso, Schefft, Ris, & Dember, 1996; Tiedens & Linton, 2001). Therefore, it would be interesting to add these two emotions and see whether angry people prefer products introduced with central features and anxious people choose the opposite. In the way that this study aims to find consumers' attitudes and intentions related to advertisements and products, these two emotions were enough to explore. However, in order to investigate the cognitive consequences of emotions, future research should explore more wide-ranging emotions. Furthermore, it would be more interesting to create a control group in the research design and observe whether certain feelings affect people's decisions more or less compared to the neutral feeling.

From an affect-as-cognitive feedback account (Huntsinger et al, 2014) these effects of happy and sad mood on attitudes toward advertisements highlighting central and secondary products features should be malleable. That is, by changing the default

processing strategy one should be able to change whether happy or sad people like one product or another. According to the affect-as-cognitive feedback account, affect triggers different cognitive thinking styles depending on the currently accessible processing style. This study demonstrates the uniform connection between affect and cognitive processing style. However, if people's default attention between global versus local focus is differed, another finding will be found. In other words, it will be demonstrated that which product or advertisement people prefer is influenced not only by affect but also the way they perceive stimuli at the moment. If future research tests this theory in detail, it is expected to observe and predict consumers' attitudes on products in more detail.

A traditional cognitive process based on optimizing utility cannot explain the current findings because the traditional process, which is rational thinking, does not leave the way open for emotion (Kant, 1991). Previous research has demonstrated that emotion and psychological distance respectively influence cognitive processing, and what I found through this study can be accounted for by these findings. However, this study was not limited in one field but extended its scope by combining emotion with the Construal Level Theory (Trope & Liberman, 2010). By combining the cognitive consequences of emotion and psychological distance, this study investigated how much emotion can produce different thinking styles and lead people to focus on different attributes when they make a decision. As a result, this study demonstrated that affect influences judgment and how emotion shapes cognitive processing.

Moreover, my present findings suggest that it might be more effective to consider consumers' feelings and create more than one advertisement by differing features of products to advertise products. As shown in this study, people determine different attitudes toward advertisements depending on their moods; therefore, it might be more advantageous to promote products with various advertisements timely and fittingly rather than to advertise with a single advertisement.

APPENDIX A
MOOD INDUCTION

Instruction for happy mod manipulation:

Life is a series of happy and sad events. In order to construct your life inventory, please recall the happiest event in your life and describe that event below for ten minutes.

Instruction for sad mod manipulation:

Life is a series of happy and sad events. In order to construct your life inventory, please recall the saddest event in your life and describe that event below for ten minutes.

APPENDIX B

MOOD MANIPULATION CHECK QUESTIONS

APPENDIX C

PILOT TEST

In the below, there are features of smartphone. For each feature, please rate the importance of these features and the positivity of the features separately by checking in the below seven-point scales.

Table 1. Table for Pilot Test

Features	Rating scale for the importance							Rating scale for the positivity						
weight of smartphone	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Not at					very		Very					very	
	all important					important		Negative					positive	
color choice	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Not at					very		Very					Very	
	all important					important		negative					positive	
camera with advanced technologies	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Not at					very		Very					Very	
	all important					important		negative					positive	
various font styles	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Not at					very		Very					Very	
	all important					important		negative					positive	
long hours standby time	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Not at					very		Very					Very	
	all important					important		negative					positive	
easy internet browser	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Not at					very		Very					Very	
	all important					important		negative					positive	
audio recording functions	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Not at					very		Very					Very	
	all important					important		negative					positive	
powerful sound system	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Not at					very		Very					Very	
	all important					important		negative					positive	
storage	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Not at					very		Very					Very	
	all important					important		negative					positive	

display setting	1 Not at all important	2	3	4	5	6	7 very important	1 Very negative	2	3	4	5	6	7 Very positive
built-in diverse ringtones	1 Not at all important	2	3	4	5	6	7 very important	1 Very negative	2	3	4	5	6	7 Very positive
Design (look) of the smartphone	1 Not at all important	2	3	4	5	6	7 very important	1 Very negative	2	3	4	5	6	7 Very positive
wide screen	1 Not at all important	2	3	4	5	6	7 very important	1 Very negative	2	3	4	5	6	7 Very positive
touch sensor	1 Not at all important	2	3	4	5	6	7 very important	1 Very negative	2	3	4	5	6	7 Very positive
smart multitasking	1 Not at all important	2	3	4	5	6	7 very important	1 Very negative	2	3	4	5	6	7 Very positive
various built-in apps	1 Not at all important	2	3	4	5	6	7 very important	1 Very negative	2	3	4	5	6	7 Very positive
diverse accessories for smartphone	1 Not at all important	2	3	4	5	6	7 very important	1 Very negative	2	3	4	5	6	7 Very positive
price	1 Not at all important	2	3	4	5	6	7 very important	1 Very negative	2	3	4	5	6	7 Very positive

APPENDIX D

QUESTIONNAIRE ABOUT ADVERTISEMENTS AND SMARTPHONE

1. How much are you interested in smartphone?

1	2	3	4	5	6	7
Not at all		Moderately			Very much	

2. Have you ever used smartphone? (If you check “No”, then pass the next (3rd) question).

1	2
Yes	No

3. If so, how long have you been using smartphone?

1	2	3	4
More than	between	between	less than
8 years	5~7 years	3~4 year	3 years

4. The advertisement that you have just read was about smartphone. How much do you like this advertisement?

1	2	3	4	5	6	7
Not at all		Moderately			Really like it	

5. If you can buy smartphone in the advertisement, are you interested in buying the smartphone in the advertisement?

1	2	3	4	5	6	7
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I'm not interested in
buying this
smartphone

Moderately

I'm interested in
buying this smartphone.

6. How much will you be willing to pay for the smartphone maximally?

1	2	3	4	5	6	7
\$100~200	\$200~300	\$300~400	\$400~500	\$500~600	\$600~700	\$700~800

APPENDIX E

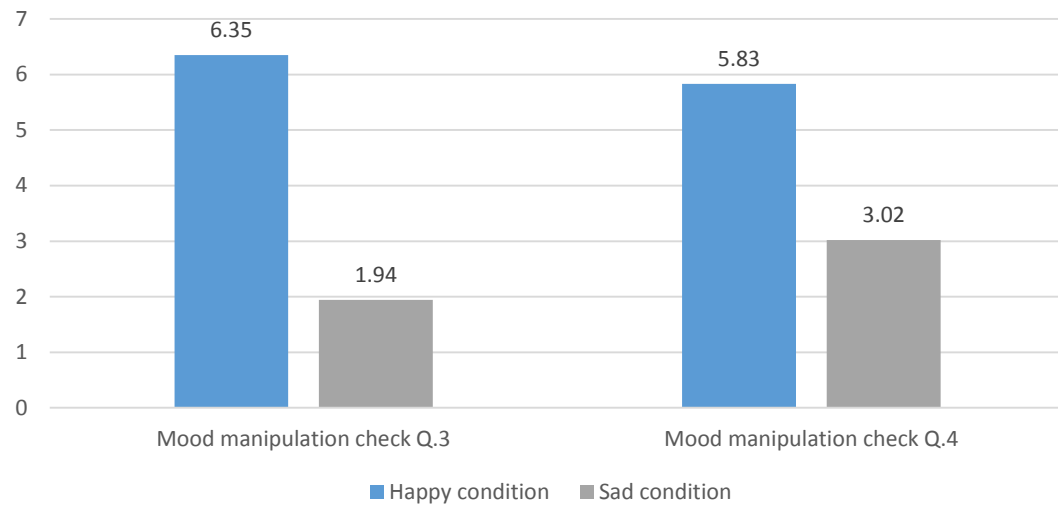
TABLE OF PILOT STUDY RESULTS

Table 2. Table of Pilot Study Results

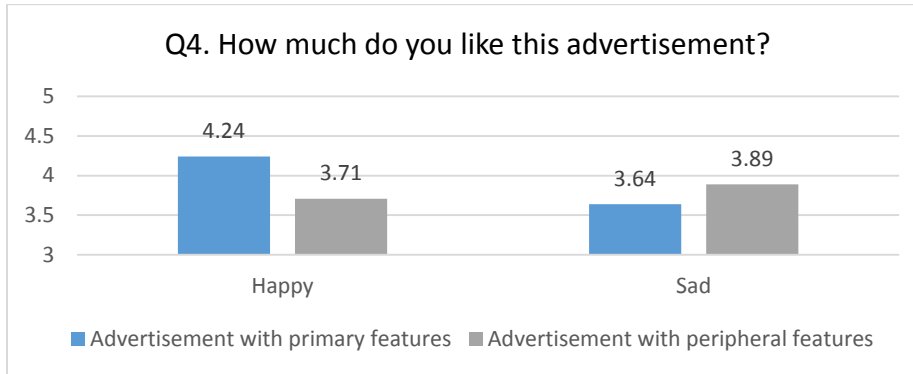
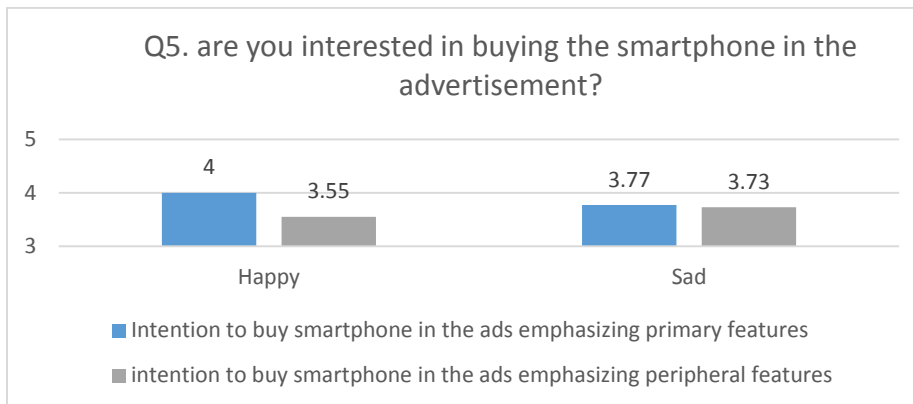
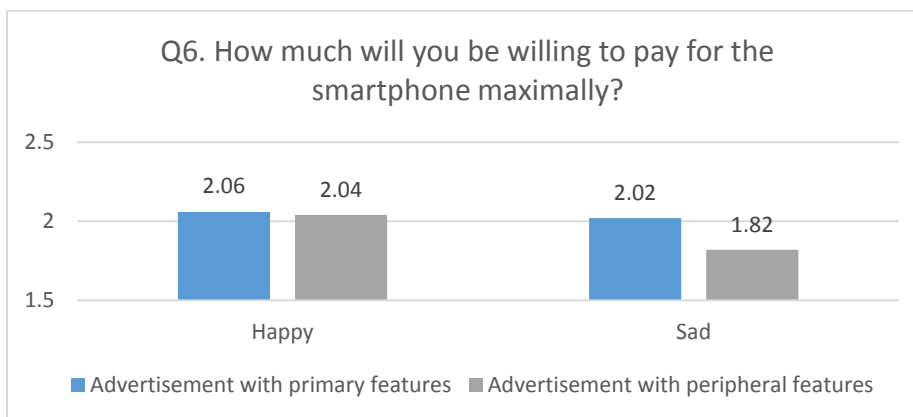
	Features	Importance	Valence
Primary	Price	6.30	6.24
	Storage	5.94	6.24
	Long hour stand by time	5.76	6
	Camera with advanced tech	5.71	6
	Touch sensor	5.65	5.77
Secondary	Built-in diverse ringtones	2.65	4.35
	Diverse accessories for smartphone	2.82	4.06
	Audio recording functions	3.41	4.18
	Color choice	4.18	4.88
	Various built-in apps	4.18	4.59

APPENDIX F
RESULTS OF MOOD INDUCTION

Figure 2. Results of Mood Induction



APPENDIX G
RESULTS OF THREE ADVERTISEMENT QUESTIONS

Figure 3. Results of the 4th Advertisement QuestionFigure 4. Results of the 5th Advertisement QuestionFigure 5. Results of the 6th Advertisement Question

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