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Image proximity in advertising appeals: Spatial distance and product types

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ABSTRACT

The study examines conditions that will make advertising images more effective. According to construal level theory, image proximity can be conceptualized as a degree of image concreteness depending on whether the image appears to be near or far. The study extends construal level theory by suggesting advertising appeals and product types as possible moderators for the effects of image proximity. A factorial design experiment reveals that close-up advertising images evoke low-level construals, with resulting higher evaluations of rational appeals. By contrast, long-shot images evoke high-level construals, with resulting higher evaluations of emotional appeals. More important, product category moderates brand attitude: utilitarian products will cause low-level construal to match more strongly with rational appeals; hedonic products will cause high-level construal to match more strongly with emotional appeals. Theoretical and managerial implications are discussed.

1. Introduction

Visual imagery is well-known to influence advertising effectiveness. Advertising researchers studying visual stimuli and advertising effectiveness have focused on image size (i.e., Percy & Rossiter, 1983; Pieters & Wedel, 2004) to show that viewers peripherally determine image size by comparing the image with the visual angle (Holway & Boring, 1941), with consequent effects on their image processing, meaning, and persuasion. For example, a distantly placed camera captures a larger viewing area, a longer image, and a smaller visual angle. A closely placed camera captures more object details. Consumers exposed to advertisements with more visual details tend to construct self-related narratives and imagine themselves in the consumption setting because concrete pictures are better than abstract pictures for enhancing the vividness of mental imagery (Babin & Burns, 1997; Phillips, 1996). Advertising research has explored the use of large displays for providing contextual information (e.g., Baudisch, Good, Bellotti, & Schraedley, 2002; Tan, Gergle, Scupelli, & Pausch, 2003) and the effects of camera angles on product evaluations (Meyers-Levy & Peracchio, 1992; Peracchio & Meyers-Levy, 2005) and judgments (Kraft, 1987; Meyers-Levy & Peracchio, 1992; Peracchio & Meyers-Levy, 2005). Only a few researchers have discussed how vision angles influence psychological processes and persuasion (Larsen, Luna, & Peracchio, 2004).

Construal level theory (CLT; Trope & Liberman, 2010) conceptualizes *image proximity* as whether the image appears to be concrete, near, or far. Spatial distance is bi-directionally related with

construal level: viewers have higher construal levels in reaction to greater spatial distance and lower construal levels in reaction to less spatial distance (Trope & Liberman, 2010), which indicates that advertisers can affect consumer responses by manipulating image closeness. Though many have examined how individuals represent spatial distances of objects (e.g., Tversky, 2003, 2005) or events (Fujita, Trope, Liberman, & Levin-Sagi, 2006), research on spatial distance has yet to be extended to creative advertising. As the visual angle (e.g., close-up vs. long shot) affects the perceived image size and the degree of visual details of pictures in advertisements, it is important to examine how image proximity affects mental representations and advertising effectiveness.

The types of advertising appeals or product categories can also affect construal levels and advertising effectiveness (e.g., Choi, Seo, & Yoon, 2017; Hernandez, Wright, & Rodrigues, 2015; Hong & Lee, 2010; Johar & Sirgy, 1991; Lepkowska-White, Brashear, & Weinberger, 2003; Septianto & Pratiwi, 2016). For example, benefit-based appeals are more effective than attribute-based appeals when a purchase is planned for the distant future, because benefits highlight abstract, global, and end-state cognitions enhancing high level construal. Comparatively, attribute-based appeals highlight concrete, detailed, and means-end cognitions and thus enhance low level construal (Hernandez et al., 2015). Similarly, consumers use high-level abstract construal to mentally represent luxury goods, and low level construal to mentally represent ordinary goods. They perceive products that are described in abstract language as being more luxurious than products described in concrete language (Hansen & Wanke, 2011).

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Consequently, in this study, we investigate the effectiveness of advertising messages depending on image proximity in conjunction with types of message appeals and product categories. We extend construal level theory by suggesting that advertising appeals and product types are possible moderators for the effects of image closeness. The study has strategic implications for advertising practitioners regarding the design of visual elements.

2. Literature review

2.1. Visual elements and construal level theory

Visual design elements such as product images, brand logos, size, and color comprise nontextual product and brand information (Pieters & Wedel, 2004) that greatly influence the effectiveness of advertising and the evaluation of advertised products (e.g., Hartmann & Apaolaza, 2013; Kim & Cheong, 2011; Roy & Phau, 2014) by evoking positive emotional responses that then enhance brand attitudes (Hartmann & Apaolaza-Ibañez, 2009; Nobbs, Foong, & Baker, 2015) and behavioral intentions (Lee et al., 2015), advertising message elaboration, and cognitive memory (Hartmann & Apaolaza, 2013). Images are more powerful than words for causing viewers to perceive meaning directly, quickly, and automatically (Luna & Peracchio, 2003).

Maximizing picture size positively influences advertising effectiveness. For example, larger product pictures generate significantly more favorable attitudes toward advertised brands (Percy & Rossiter, 1983). In one experiment, viewers who were exposed for six seconds to large (90 in.) and small (20 in.) pictures responded to the larger pictures with greater emotional responses and easier recall (Detenber & Reeves, 1996). Similarly, larger illustrations are more powerful for capturing attention (Wells, Burnett, & Moriarty, 2000). Thus, “the picture is the most important structural element in magazine advertising, for both consumers and business audiences...the straightforward rule for magazine advertising, therefore is: the bigger picture, the better” (Rossiter & Percy, 1997). However, are larger pictures always best?

Construal level theory (CLT) provides clues for understanding how consumers react to long and close visual angles. The theory has been used to explain how small versus large psychological distance influences consumer construal, judgment, and behavior. CLT asserts that temporal, spatial, or sensory psychological distances increase levels of abstraction when consumers form mental representations of their decision alternatives (Kim, Park, & Wyer, 2009; Liberman & Trope, 1998; Trope & Fishbach, 2000; Trope & Liberman, 2003, 2010; Trope, Liberman, & Wakslak, 2007; Tsai & McGill, 2011). High-level construal is generally viewed as relatively abstract, context-independent, and superordinate representations of primary features such as goals for buying. By contrast, low-level construal is generally viewed as relatively concrete, context-dependent, and subordinate representation of secondary features such as feasibility of outcomes.

Although CLT considers different types of distances, spatial distance is the more basic: it is learned earlier, detected more clearly, less ambiguous, and easier to communicate (Trope & Liberman, 2010). For example, in a study comparing spatial and temporal distance, participant responses were affected when they thought about space before they answered questions about time but not when they thought about time before they answered questions about space (Boroditsky, 2000). Spatial distance is also relatively stable, and can be controlled by moving closer or farther away. Consequently, advertisers can visually manipulate angles to influence perceived spatial distances. When consumers see a close view of a product, they perceive it as spatially close. When they view the product in a long shot, they perceive it as spatially distant.

CLT suggests that spatially distant events are associated with high-level construals (Trope & Liberman, 2010). When consumers perceive that objects are far away, even with available and reliable concrete information to the contrary, they will have more abstract, higher-level

construals (Henderson, Wakslak, Fujita, & Rohrbach, 2011). In one experiment, when study participants imagined behavior occurring at far rather than near locations, they were more likely to think about the common motives driving behavior (Fujita et al., 2006). When they viewed video purportedly taped in distant locations, they used more abstract words to describe the video (Fujita et al., 2006). Likewise, consumers were more likely to infer abstract traits from behavioral information framed as spatially distant (Rim, Uleman, & Trope, 2009). Therefore, if visual angles can affect inferences and construals, they may also affect message effectiveness.

3. Hypothesis development

3.1. The effects of congruity between spatial distance and advertising appeals

Much research is devoted to examining consumer responses to advertisers' creative attempts to motivate purchases and influence attitudes toward products or services (Berkman & Gilson, 1986; Cornelis, Adams, & Cauberghe, 2012; Green & Pelozo, 2014; Stafford & Day, 1995; Williams & Drolet, 2005; Zhang, Sun, Liu, & Knight, 2014) and to their fundamental strategies regarding the careful selection of emotional or rational advertising appeals (Turley & Kelley, 1997).

Rational advertising appeals stress product or service functions, benefits, and advantages; emotional advertising appeals emphasize the fulfillment of psychological, social, or symbolic needs (Kotler, 2003). Thus, rational appeals would emphasize physical features, details, and quantitative characteristics of products; emotional appeals would emphasize the satisfaction to be gained from ownership. Therefore, consumers process rational persuasions by using logic, facts, and analytical and sequential thinking, whereas they process emotional appeals synthetically and holistically (Belch & Belch, 2012).

CLT suggests that messages are more persuasive if they underscore higher-level features when referring to decisions about distal objects (Dhar & Kim, 2007). Consumers tend to represent spatially near objects concretely and to represent spatially distant objects abstractly, so spatial distance should make it more difficult to process concrete objects and easier to process abstract objects. Thus, they can process information better when the distance and the presentation medium are congruent (Amit, Algom, & Trope, 2009). Persuasiveness is especially enhanced when psychological distances are matched with regulatory focus (Lee, Keller, & Sternthal, 2010) and message framing (White, MacDonnell, & Dahl, 2011). Similarly, advertising effectiveness also can be enhanced when construal levels and advertisement appeal types are matched. For example, matching temporal distance with appeals featuring product attributes (e.g. a notebook's processor) or benefits (e.g. a notebook's reliable performance) will be more effective. In fact, a study showed that consumers considering a future purchase evaluated the product more positively when the message included benefit appeals, but attribute-based appeals were more persuasive when low construal levels were temporarily induced (Hernandez et al., 2015).

Therefore, congruence between construal level and advertising appeals featuring rational or emotional elements can enhance persuasiveness. Rational appeals primarily focus on concrete and observable physical features, details, and quantitative characteristics, enhancing low-level abstraction; emotional appeals primarily focus on the desirability of owning or using the product, enhancing high-level abstraction. Thus,

H1a. When consumers perceive that the advertised product image is spatially close, they will have more positive (1) attitudes toward the ad, (2) attitudes toward the product, and (3) purchase intentions in response to rational appeals.

H1b. When consumers perceive that the advertised product image is spatially distant, they will have more positive (1) attitudes toward the ad, (2) attitudes toward the product, and (3) purchase intentions in

response to emotional appeals.

3.2. The effects of congruity between advertising appeals and product category

Congruity, a product's fit within the message context, has been applied in advertising and consumer behavior to explain attitude formation. For example, congruent stimuli fits established schemas and thus evokes positive feelings and less elaboration (Mandler, 1982). Congruity also allows consumers to maintain uniform thoughts, feelings, and behaviors (Solomon, 1996). Thus, persuasiveness is most effective when the message fits with recipients' cognitive, motivational, or affective states (Cesario, Grant, & Higgins, 2004). Correspondingly, ads that are congruent with product types can be more persuasive (Johar & Sirgy, 1991; Shavitt, 1990).

Products typically have either utilitarian (e.g., office supplies, garden supplies) or hedonic (e.g., apparel, cosmetics) purposes. Consumers have objective problem-solving reasons for purchasing utilitarian products and subjective desire-solving reasons for purchasing hedonic products (Babin, Darden, & Griffin, 1994).

Advertising appeals are most effective when they are congruent with the product being advertised. For example, aspirin primarily has utilitarian value as a pain reliever; hence aspirin advertisements should feature rational rather than emotional appeals (Shavitt, 1990). Consumers have utilitarian and cognitive "thinking" reasons for purchasing products that deal with problems or dissatisfaction (Ratchford, 1987) and thus focus on functional performance, costs/benefits, and tangible, objective product qualities. When they purchase products that offer self-enhancement, they have intangible subjective "feeling" desires to satisfy emotional needs, express values, gratify egos, gain social acceptance, and delight the senses (Ratchford, 1987). The multi-component theory of attitudes has also shown that consumers generally prefer advertising appeals that are congruent with attitudes associated with the object (Drolet & Aaker, 2002). In a study of age-related differences in congruity effects, young adult consumers favored affective ads for hedonic products and rational ads for utilitarian products (Drolet, Williams, & Lau-Gesk, 2007), indicating that rational appeals are more suitable for utilitarian products, while emotional appeals are more appropriate for hedonic products.

H2a. Consumers will have more positive (1) attitudes toward ads, (2) attitudes toward products, and (3) purchase intentions in response to rational appeals for utilitarian products.

H2b. Consumers will have more positive (1) attitudes toward ads, (2) attitudes toward products, and (3) purchase intentions in response to emotional appeals for hedonic products.

3.3. The effects of congruity between spatial distance, advertising appeals, and product category

Although matched construal levels and message frames can increase persuasion (e.g. Hernandez et al., 2015; White et al., 2011), the impact of construal level in responses to emotional versus rational appeals may depend on whether a hedonic or utilitarian product is being advertised. Advertising appeals tend to vary according to the type of product and individual psychological characteristics (Kim, Ratneshwar, & Thorson, 2017). Consumers are more likely to process information and then purchase products according to their goals, attitudes, or processing styles (Kim & John, 2008). For example, they purchase utilitarian products to fulfill instrumental and practical needs (Khan & Dhar, 2010); thus rational appeals match their needs to know about functional aspects. In contrast, hedonic products are desired for pleasure, fantasy, and fun (Khan & Dhar, 2010), so affectively-based emotional appeals fulfill the purpose (Fabrigar & Petty, 1999).

Information has more influence and evokes more elaboration when

it matches consumers' attitudes, goals, or processing styles (Lee, Aaker, & Gardner, 2000). Consequently, rational appeals using the spatially near condition may have greater influence on attitudes toward utilitarian products. Comparatively, spatially distant conditions will have stronger effects for consumers affectively motivated to seek hedonic products.

H3a. For the utilitarian product, congruity between rational appeals and the spatially close condition will have superior effects regarding (1) attitudes toward the ad, (2) attitudes toward the product, and (3) purchase intentions.

H3b. For the hedonic product, congruity between emotional appeals and the spatially distant condition will have superior effects regarding (1) attitudes toward the ad, (2) attitudes toward the product, and (3) purchase intentions.

4. Method

4.1. Study design

This study used a 2 spatial distance (near distance vs. far distance) \times 2 advertising appeal (rational vs. emotional) \times 2 product category (utilitarian vs. hedonic) factorial experimental design. Following prior research (e.g. Drolet et al., 2007), we manipulated rational versus emotional advertising appeals for hedonic versus utilitarian product types. Before conducting the main experiment, we conducted three pretests to check whether (1) product categories are perceived as utilitarian versus hedonic, (2) participants perceived that our advertising manipulation was rational versus emotional, and (3) our manipulation of spatial distance worked as intended.

4.2. Pretest 1

Based on extant research (e.g. Dhar & Wertenbroch, 2000; Lu, Liu, & Fang, 2016), we picked six product categories that might be distinctively perceived as hedonic or utilitarian: laptop, ring, camera, luxury watch, car, and sunglasses. Thirty undergraduate and graduate students from a major university in Seoul participated in the first pretest. Respondents were asked to evaluate perceived utilitarian and hedonic value of each product category. They indicated whether they agreed or disagreed with six statements from prior studies (Lee & Lim, 2004; Voss, Spangenberg, & Grohmann, 2003) for measuring product attributes, on a 7-point scale: "I would feel uncomfortable without this product," "This product has practical uses," "This product is necessary and practical," "This product would allow me to stand out," "This product would cause others to envy me," "This product would improve my self-image." Participants perceived the laptop ($M = 6.05$, $SD = 0.84$) to be the most utilitarian, and the luxury watch ($M = 4.87$, $SD = 1.34$) to be the most hedonic. The laptop was considered to be more utilitarian ($M = 6.05$) and less hedonic ($M = 3.63$) than the luxury watch ($M = 2.65$, $t = 9.63$, $p < 0.001$; $M = 4.88$, $t = -4.94$, $p < 0.001$). Thus, we selected the laptop as the utilitarian product and the luxury watch as the hedonic product for the main experiment.

4.3. Pretest 2

Based on extant research (e.g. Drolet & Aaker, 2002; Drolet et al., 2007), we picked a rational appeal for the laptop: "Revolutionary weight, breaking the rule with 1 kg's laptop" and an emotional appeal: "Become the foremost global leader with this laptop." We picked a rational appeal for the luxury watch: "Revolutionary material, titanium that never scratches" and an emotional appeal: "Become the icon of passionate young men with this watch." Respondents evaluated their perceptions of each rational and emotional appeal on a 7-point bipolar scale from 1 = *rational/objective/realistic/detailed* to 7 = *emotional/*

subjective/unrealistic/abstract. An independent samples *t*-test showed a significant mean difference ($t = 7.596, p < 0.001$) between the rational appeal ($M = 2.518, SD = 1.35$) and the emotional appeal ($M = 5.442, SD = 1.14$) for the laptop advertisement. Results also showed a significant mean difference ($t = 6.156, p < 0.001$) between the rational appeal ($M = 2.792, SD = 1.42$) and the emotional appeal ($M = 5.384, SD = 1.39$) for the luxury watch.

To check whether our manipulation of spatial distance worked as intended, respondents viewed four images: (a) close-up laptop image, (b) long-shot laptop image, (c) close-up luxury watch image, (d) long-shot luxury watch image. They evaluated the perceived spatial distance of each advertisement on a 7-point bipolar scale: 1 = *near*, 7 = *far*. An independent samples *t*-test showed a significant mean difference ($t = 11.57, p < 0.001$) between the close-up laptop image ($M = 1.93, SD = 0.74$) and the long-shot laptop image ($M = 3.93, SD = 0.583$). An independent samples *t*-test also confirmed a significant mean difference ($t = 12.97, p < 0.001$) between the close-up luxury watch image ($M = 1.73, SD = 0.785$) and the long-shot luxury watch image ($M = 4.20, SD = 0.664$).

4.4. Pretest 3

To check whether respondents had different construals of the close-up and long-shot images, we recruited 40 undergraduate and graduate students from a major university in Seoul. They indicated their perceived construal level of each image on a 7-point bipolar scale: 1 = *not detailed/not abstract* to 7 = *detailed/abstract*. A significant mean difference occurred between the detailed construal level for the close-up image and the long-shot image ($F = 95.61, p < 0.001$). The image perceived as near showed a higher mean detailed construal level ($M = 4.48, SD = 0.50$) than the image perceived as far ($M = 2.88, SD = 0.53$). A significant mean difference occurred between the construal level of the close-up image and long-shot image ($F = 89.70, p < 0.001$). The image perceived as near showed lower mean of abstract construal level ($M = 3.20, SD = 0.47$) than the image perceived as far ($M = 4.53, SD = 0.41$). The results confirmed that respondents had low-level construals regarding the close-up image and high-level construals regarding the long-shot image.

4.5. Developing stimuli

Based on the product categories selected in the first pretest, we modified real product advertisements in consumer magazines to create the ad stimuli. Advertising and marketing researchers frequently model ad stimuli after extant ads because modeling tends to increase external validity (see Heiser, Sierra, & Torres, 2008; Lagerwerf & Meijers, 2008). The ad stimuli followed the layout of their real counterparts, but the product, copy, and background were changed. To avoid previous attitude biases, we used fictitious brand names. Based on the results of the second pretest, we modified advertising appeals (utilitarian vs. hedonic) and spatial distance (near vs. distant) and created eight advertisements for the experiment.

4.6. Experiment procedure and dependent measures

Participating in the experiment were 108 men and 124 women, recruited from a café in downtown Seoul. Each participant was randomly assigned to one of eight study sets and given a booklet containing a color advertisement and a questionnaire. The ads differed in spatial distance (close or long shots), message appeals (rational or emotional), and stimulus (laptop or luxury watch). After participants viewed the advertisement, they answered the questionnaire, including measures of the dependent variables and demographic information. Participants then were debriefed and thanked for their participation.

Three advertising effect constructs served as dependent variables: attitude toward the ad, attitude toward the product, and purchase

intentions. For attitude toward the ad, we used three 7-point bipolar items (*dislike/like*, *unfavorable/favorable*, and *positive/negative*) (Cronbach's alpha = 0.855; MacKenzie, Lutz, & Belch, 1986). Attitude toward the brand was measured using four bipolar items (*bad/good*, *unfavorable/favorable*, *dislike/like*, and *not useful/useful*) (Cronbach's alpha = 0.822; Cha, Cho, & Nam, 1990). Purchase intention was assessed using three bipolar items (*unlikely/likely*, *improbable/probable*, and *definitely not/definitely*) (Cronbach's alpha = 0.891; Stafford, Stafford, & Chowdhury, 1996).

5. Results

5.1. Test of hypotheses

For H1a and H1b, an analysis of variance (ANOVA) was performed to test two-way interaction effects of spatial distance and advertising appeals on attitude toward the ad, attitude toward the brand, and purchase intention. Spatial distance and advertising appeals had significant interaction effects on attitude toward the ad ($F(1, 231) = 25.62, p < 0.001$) and toward the brand ($F(1, 231) = 29.65, p < 0.001$).

Particularly, when the image appeared to be close, rational appeals ($M = 3.78$) generated more favorable attitudes toward the ad than did emotional appeals ($M = 3.26; F(1, 234) = 8.00, p < 0.01$). In contrast, when the image appeared to be distant, emotional appeals ($M = 3.85$) generated more favorable attitudes toward the ad than did rational appeals ($M = 3.11; F(1, 234) = 19.41, p < 0.001$). When the image appeared to be close, rational appeals ($M = 3.83$) generated more favorable attitudes toward the brand than did emotional appeals ($M = 3.34; F(1, 234) = 9.77, p < 0.005$). When the image appeared to be distant, emotional appeals ($M = 3.95$) generated more favorable attitudes toward the brand than did rational appeals ($M = 3.27; F(1, 234) = 21.63, p < 0.001$). However, spatial distance and ad appeals showed no significant interaction regarding purchase intentions ($F(1, 231) = 0.24, p = n.s.$). Thus, the results supported H1a and H1b for attitude toward the ad and brand (Figs. 1 and 2).

For H2a and H2b, effects of advertising appeals and product category had significant two-way interactions for attitudes toward the ad ($F(1, 231) = 28.27, p < 0.001$) and brand ($F(1, 231) = 17.01, p < 0.001$). A similar pattern was detected for purchase intention but interaction effects were only marginally significant ($F(1, 231) = 3.61, p = 0.059$).

Particularly, rational appeals for the utilitarian product ($M = 3.67$) rather than the hedonic product generated more positive attitudes toward the ad ($M = 3.21; F(1, 224) = 6.93, p < 0.01$). Emotional appeals for the hedonic product ($M = 3.99$) rather than the utilitarian product generated more positive attitudes toward the ad ($M = 3.12; F$

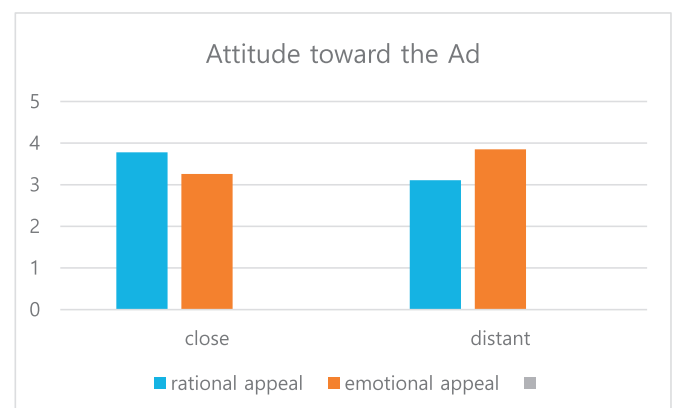


Fig. 1. Two-way interaction between spatial distance and advertising appeals for attitude toward advertising.

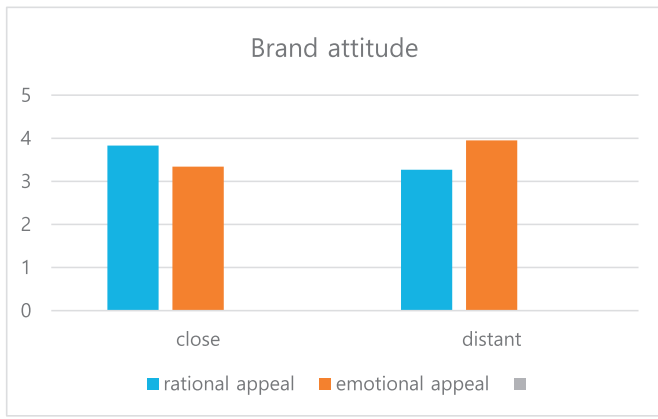


Fig. 2. Two-way interaction between spatial distance and advertising appeals for brand attitude.

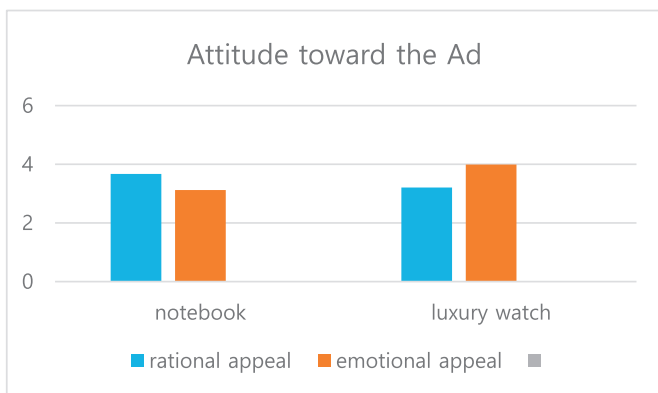


Fig. 3. Two-way interaction between ad appeals and product category for attitude toward advertising.

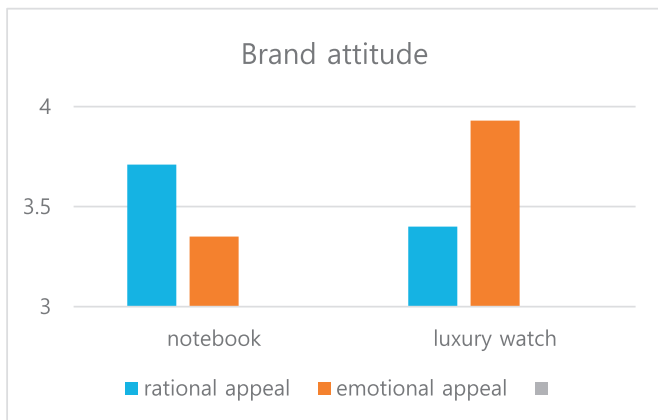


Fig. 4. Two-way interaction between ad appeals and product category for brand attitude.

(1, 224) = 23.49, $p < 0.001$). Rational appeals for the utilitarian product ($M = 3.71$) rather than the hedonic product generated more positive brand attitude ($M = 3.40$; $F(1, 224) = 4.15, p < 0.05$). Emotional appeals for the hedonic product ($M = 3.93$) rather than the utilitarian product generated more positive brand attitude ($M = 3.35$; $F(1, 224) = 14.17, p < 0.001$). Emotional appeals generated higher intentions to purchase the hedonic product ($M_{rational} = 2.54$ vs. $M_{emotional} = 2.89$), and rational appeals generated higher intentions to purchase the utilitarian product ($M_{rational} = 2.82$ vs. $M_{emotional} = 2.61$), but only marginally significantly ($F(1, 231) = 3.61, p = 0.059$). Thus, the results supported H2a and H2b for attitudes toward the ad and the brand (Figs. 3 and 4).

For H3a and H3b, an analysis of variance (ANOVA) was performed to test three-way interaction effects of spatial distance, advertising appeals, and product category on attitudes toward the ad, attitudes toward the brand, and purchase intentions. Spatial distance, advertising appeals, and product category significantly interacted to affect attitudes toward the brand ($F(1, 231) = 4.25, p < 0.05$).

For further analysis, we split the data by product category and examined the two-way interaction between spatial distance and ad appeals. For the utilitarian product, rational appeal was superior to the emotional appeal when the image appeared to be close ($M_{rational} = 4.07, M_{emotional} = 2.91$; $F(1, 110) = 20.86, p < 0.001$), and emotional appeal was superior to the rational appeal when the image appeared to be distant ($M_{rational} = 3.34, M_{emotional} = 3.80$; $F(1, 110) = 4.07, p < 0.05$). Thus, for the utilitarian product, rational appeal had superior effects in the close-image condition than did emotional appeal in the distant-image condition. For the hedonic product, emotional appeal was superior to the rational appeal when the image appeared to be distant ($M_{rational} = 3.20, M_{emotional} = 4.10$; $F(1, 114) = 23.74, p < 0.001$) but the appeals were the same when the image appeared to be close ($M_{rational} = 3.60, M_{emotional} = 3.77$; $F(1, 114) = 0.76, p = n.s.$). Thus, emotional appeal in the distant image condition had superior effects in comparison with the rational appeal effects in the close image condition. No three-way interaction was detected for attitude toward the advertising or purchase intention. Hence, H3a and H3b were supported for attitude toward the brand (Fig. 5).

6. Discussion

This research highlights conditions that will make advertising images more effective. The study reveals that close-up advertising images evoke low-level construals, with resulting higher evaluations of



Fig. 5. Three-way interaction between spatial distance, advertising appeals, and product category for brand attitude.

rational appeals. By contrast, long-shot images evoke high-level construals, with resulting higher evaluations of emotional appeals. We confirmed that a visual image appearing to be close has more positive effects on attitude toward ad and brand attitude with rational appeals, whereas a visual image appearing to be distant has more favorable effects on attitude toward ad and brand attitude with emotional appeals. As expected, ad appeals and product category interacted with attitude toward ad and brand attitude. Further analysis shows that product category moderates the fit effects between advertising appeals and construal level for brand attitude. The findings have three theoretical implications for the extant literature. First, visual elements are known to influence persuasiveness (Lombard, Ditton, Grabe, & Reich, 1997; Percy & Rossiter, 1983; Pieters & Wedel, 2004), but our research, grounded in construal level theory, adds boundary conditions by considering that image closeness triggers construal levels, which then influences evaluation of advertising messages. Second, we add spatial distance to extend understandings regarding needs to match ad appeals with temporal distance. That is, matching ad appeals with spatial distance is more persuasive. The results are consistent with a prior study showing that when people consider making purchases in the distant future, they are more persuaded by benefit-based appeals with high construal level than by attribute-based appeals with low construal level (Hernandez et al., 2015). Finally, our research correlates with research demonstrating that persuasive advantages occur when construal levels, message appeals, and product characteristics are matched (Hernandez et al., 2015; Lee et al., 2010; Septino & Pratiwi, 2014; White et al., 2011). When the ad appeals are congruent with the advertised product type, construal levels have an even more powerful interactive effect on brand attitude.

Interestingly, image proximity had no interaction effects on purchase intentions either for message appeals or product types, perhaps because the stimulus ads were for fictitious brands rather than familiar brands. The stimulus ads also relied on visual image rather than textual argument. Confidence in brands plays a key role in predicting purchase intentions (Laroche & Sadokierski, 1994). Perhaps the stimulus was too weak to differentiate purchase intentions because the ads facilitated heuristic processing without giving sufficient information for motivating purchase decisions.

The results of this research have several managerial implications for marketers and advertising practitioners. First, the results suggest that advertisers can vary the degrees of image proximity to manipulate construal levels. Considering that construal levels and psychological distances have a bidirectional relationship (Liberman, Trope, & Wakslak, 2007; Trope & Liberman, 2010), more study is needed regarding whether the same result can be replicated in different dimensions of psychological distance or media types. For example, are

emotional appeals more effective for distant future purchases and rational appeals better for imminent purchases? Would emotional messages in video format be more effective for hedonic products? Would rational messages in text format be more persuasive for utilitarian products? Second, advertisers could utilize spatial distances prior to ad exposure to enhance ad effectiveness. In addition to varying image proximity, they might emphasize the nearness of a store location (Khan, Zhu, & Kalra, 2011) to trigger low or high construal levels. Advertisements for local brands or stores might be more effective if they provide concrete information with rational appeals. Comparatively, advertisements for global brands or businesses, such as foreign airlines, might emphasize abstract information with emotional appeals. Finally, design layouts for utilitarian products might do best by providing concrete information with rational appeals. In contrast, ads for hedonic products might provide abstract information focusing on emotional appeals, such as humor and sex.

This study has several limitations indicating suggestions for future research. First, the study compared effects of image proximity matched with message appeals in utilitarian versus hedonic products. Future research should examine how the match-up appears in other product categories such as search goods versus experience goods, high involvement versus low involvement products, familiar versus obscure brands, luxury versus economy brands, and extended versus unextended brands. Second, rather than focus on advertising appeals, future research might consider other design elements that have possible match-up effects with various dimensions of psychological distance and media types. For example, social media feed ads could be examined regarding effects of detailed information in infographics or video materials in temporal or social distance contexts. Third, we developed stimulus ads to maximize the effects of image proximity. Participants could perceive the ads as being somewhat artificial. Therefore, future study should test various angles and sizes that affect image closeness. Finally, a single study in one country can limit the generalizability of results. For example, rational appeals and spatially near conditions had no fit with brand attitudes toward the hedonic products, perhaps because Korea's collectivistic culture tends to be more congruent with emotional appeals, in contrast with individualistic cultures that may fit better with rational appeals (e.g. Kim, 2016). Therefore, future research should replicate the results in more diverse cultural settings.

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Appendix A. Stimuli for close-up versus long-shot condition with message appeals



Rational appeal: “Revolutionary weight, breaking the rule with 1 kg’s laptop”.



Emotional appeal: “Become the foremost global leader with this laptop”.



Rational appeal: “Revolutionary material, titanium that never scratches”.



Emotional appeal: “Become the icon of passionate young men with this watch”.

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