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Beyond Attention Effects: Modeling the Persuasive and Emotional Effects of Advertising Creativity

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While creativity in advertising is a growing area of marketing research, relatively little is known about how the effects of creativity are produced. Accordingly, this research explores the basic persuasive (i.e., desire to postpone closure) and emotional (i.e., positive affect) mechanisms through which creative ads exert their influence on consumer viewing and purchase intentions. In addition, the model hypothesizes that the level of involvement with the ad moderates the desire to postpone closure effects but not the emotional impact. An overall model of the impact of ad creativity is developed and tested using structural equations analysis. Results from three experiments show the model receives good support.

Key words: advertising creativity; information processing; persuasion; resistance to persuasion

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Introduction

Creativity is a central component of advertising success, yet there are surprisingly few studies investigating this topic (Zinkhan 1993) and only a handful that have attempted to explain how its effects are achieved (e.g., Goldenberg et al. 1999, Smith and Yang 2004, Smith et al. 2007, Till and Baack 2005). Historically, advertising textbooks have emphasized the “attentional effects” of ad creativity—i.e., they stand out in ad clutter and therefore receive more attentional resources from potential consumers. Recent research refers to this as a “contrast effect” (Smith and Yang 2004), and attentional effects of creative ads have been empirically documented (Pieters et al. 2002, Smith et al. 2007).

What is needed in the marketing literature is a better understanding of exactly how and when ad creativity exerts its effects. Accordingly, this research has three major goals. First, the effects of ad creativity on persuasion are examined by considering two key processing variables: (a) desire to postpone cognitive closure and (b) positive affect. Second, empirical tests are performed to determine if these two variables impact the key dependent variables of ad reviewing intentions and brand purchase intentions. Third, based on past models (MacInnis and Jaworski 1989, Petty and Cacioppo 1986), we predict that the influence of ad

creativity on cognitive variables will be moderated by the consumer’s level of involvement in the ad. This hypothesis is particularly important because boundary conditions (like the level of involvement) for ad creativity effects have not yet been examined in the marketing literature.

To begin, we identify *desire to postpone closure* (DPC) as an important variable that can directly influence resistance to persuasion. Then, a brief review of the background literature in advertising creativity is presented, followed by our theoretical framework, which hypothesizes significant cognitive and affective effects from ad creativity. Finally, data are reported from a series of studies that provide empirical evidence for how and when ad creativity exerts its effects.

Ad Processing Models

Traditionally, advertising models have investigated the key cognitive, affective, and conative stages of consumer response. Although there are many variations of these models, most include stages such as attention to the ad, accepting the ad message, liking the brand, and purchase intentions (Lavidge and Steiner 1961, Smith and Swinyard 1983, Smith et al. 2008, Wright 1973). While the ultimate goal of most advertising is to persuade consumers to buy the promoted brand, this goal is hard to accomplish. The

main difficulty is that advertising is a vested-interest source, so consumers tend to counterargue, discount, and source derogate ad claims. Indeed, the Integrated Information Response Model (Smith and Swinyard 1982, 1983, 1988) and the Hypothesis Testing Model (Hoch and Ha 1986) both suggest that consumer discounting significantly reduces message acceptance.

Accordingly, any variable under managerial control that could reduce consumers' resistance to persuasion would be highly valued. This research tests the hypothesis that exposure to creative ads can trigger a DPC (e.g., Kardes et al. 2004), thereby making consumers more curious and open-minded¹ about the message and brand and less likely to make snap and defensive judgments. Consequently, more favorable behavior intentions are likely to be formed. We focus on DPC because it has been shown to produce a variety of favorable persuasion effects, including decreasing the selective use of information (Stuhlmacher and Champagne 2000), discouraging the use of stereotypes and biases (De Dreu 2003), and reducing the tendency to reject opinion deviates (Kruglanski and Webster 1991).

It is also important to explore beyond the cognitive stage and examine the possibility that ad creativity produces significant *affective* impact. It is well known that ad-created affect can be transferred to brand attitudes and purchase intentions (MacKenzie et al. 1986), and there are cogent reasons to predict that ad creativity will trigger positive affect. Thus, this research expands past findings by investigating how ad creativity affects cognitive (DPC) and emotional (positive affect) responses. In addition, the level of consumer involvement is investigated as a variable that could moderate the cognitive effects.

Ad Creativity Literature

Ad Creativity

Ad creativity is usually defined as a function of two traits: divergence and relevance (Smith and Yang 2004, Smith et al. 2008, Tellis 1998, Thorson and Zhao 1997). *Divergence* refers to the extent to which an ad contains elements that are novel, different, or unusual (Smith and Yang 2004, Till and Baack 2005). Smith et al. (2007) identified five *formative* factors that could account for the various ways in which divergence

could be achieved in an advertisement: *originality*, *flexibility*, *elaboration*, *synthesis*, and *artistic value*.² *Relevance* refers to the extent to which the ad contains elements that are *meaningful*, *appropriate*, or *valuable* to the audience. These elements may be brand related (e.g., new information on salient attributes) or ad related (e.g., meaningful images and music).

Smith et al. (2007) examined the divergence \times relevance (D \times R) definition over a series of studies and found that consumers perceive ad creativity as having two determinants: divergence and the interaction between divergence and relevance. Based on these findings, creative ads are defined as ads high in both divergence and relevance, while low-creative ads are defined as any other combination of divergence and relevance (i.e., low/high, high/low, low/low).

Summary of Past Ad Creativity Research

Empirical studies directly related to creativity in advertising have been few in number and contain discrepancies in terms of how ad creativity is defined, manipulated, and measured. For a review of research on ad creativity, see the table in the Technical Appendix (at <http://mktsci.pubs.informs.org>). This summary table shows that only a few ad creativity studies have investigated processing variables beyond attention effects. To address this knowledge gap, we first develop a model that describes how ad creativity influences both cognitive and affective processing.

Cognitive Effects: DPC

As noted, consumers are often in a defensive processing stance because ads are vested-interest sources. One way to reduce this resistance to persuasion is to *reduce* the consumer's "need for cognitive closure" for brand messages. Cognitive closure refers to an individual's desire for a firm answer to a question and an aversion toward ambiguity (Kardes et al. 2004, Kruglanski and Webster 1996). Thus, there is a continuum anchored at one end by a high need for cognitive closure, while the other end is anchored by a high DPC. This is an important variable because if consumers have a high need for closure, they will resist

¹ *Open-mindedness* is defined as people's willingness to have their knowledge confronted by alternative opinions or inconsistent information (Webster and Kruglanski 1994). In a persuasion/advertising context, an open-minded mindset indicates (a) consumers are not willing to reach a premature closure about the brand, and they are open for new information about the brand; and (b) consumers are less likely to use defensive mechanisms when processing persuasive messages (Jacks and Cameron 2003).

² The definitions of the five dimensions of divergence are as follows:

- (a) *Originality*—Ads that contain elements that are rare, surprising, or move away from the obvious and commonplace;
- (b) *Flexibility*—Ads that contain different ideas or switch from one perspective to another;
- (c) *Elaboration*—Ads that contain unexpected details, or finish and extend basic ideas so they become more intricate, complicated, or sophisticated;
- (d) *Synthesis*—Ads that combine, connect, or blend normally unrelated objects or ideas;
- (e) *Artistic value*—Ads that contain artistic verbal impressions or attractive colors or shapes.

persuasion and remain loyal to their current brand. In such cases, advertising for alternative brands will have little impact.

DPC vs. Need for Cognition

It is important to highlight the differences between DPC and need for cognition (NFC). Conceptually, NFC indicates that people engage in and enjoy effortful cognitive activities. DPC refers to consumers who (a) do not want to rush to a conclusion about an issue, (b) process information in a more open-minded way, and (c) are less likely to use defensive strategies. Consumers with high NFC may process more information but do not necessarily do so in an open-minded way. Indeed, distinctions between NFC and DPC have been made by Webster and Kruglanski (1994) and Kardes et al. (2004) who note (a) that attaining closure can require either extensive processing or limited processing, and (b) there is not necessarily a significant correlation between the two constructs.

DPC

Individuals who are high in need for closure are characterized by considerable cognitive impatience, which has major implications for ad processing. Specifically, consumers with high need for closure tend to draw snap conclusions about the brand and leap to judgments on the basis of incomplete information. Thus, their judgments about the brand are often biased or inaccurate. Conversely, when DPC is high, individuals prefer to suspend judgment until they have processed all the available information about the brand or until time and energy are depleted (Kruglanski and Webster 1996).

DPC also can be a temporary state activated by situational factors. Examples of conditions that have been shown to postpone closure include: task attractiveness (Webster 1993), level of personal involvement (Eagly and Chaiken 1993), and accountability (Lerner and Tetlock 1999). This research examines DPC as a temporary state induced by exposure to creative ads.

Consumers who are motivated to postpone cognitive closure will be more open-minded and curious because they are less bounded by their initial position and are more willing to change their opinion if necessary (Kruglanski and Webster 1996). Thus, DPC not only implies that people are seeking more information but that they are processing incoming information *more open-mindedly, and with less defensive motives* (De Dreu 2003, Kruglanski and Webster 1991, Mayseless and Kruglanski 1987).

Positive Affect

Advertising models (e.g., MacInnis and Jaworski 1989) also predict that affect will be generated during ad processing. These emotions can result from

processing the ad message, ad execution elements, or the viewing environment. The impact of positive affect on persuasion can operate in a number of ways. For instance, affect can (a) be seen as a heuristic of feeling (Schwarz 1990), (b) bias consumer information processing (Zuwerink and Devine 1996), or (c) generate deeper message processing (Zuwerink and Devine 1996). These different mechanisms reveal that positive affect normally produces favorable ad responses.

Modeling Cognitive and Affective Effects of Ad Creativity

To examine the role of ad creativity, we develop a model using both processing and response variables and then test it under high and low ad involvement conditions (see Figure 1).

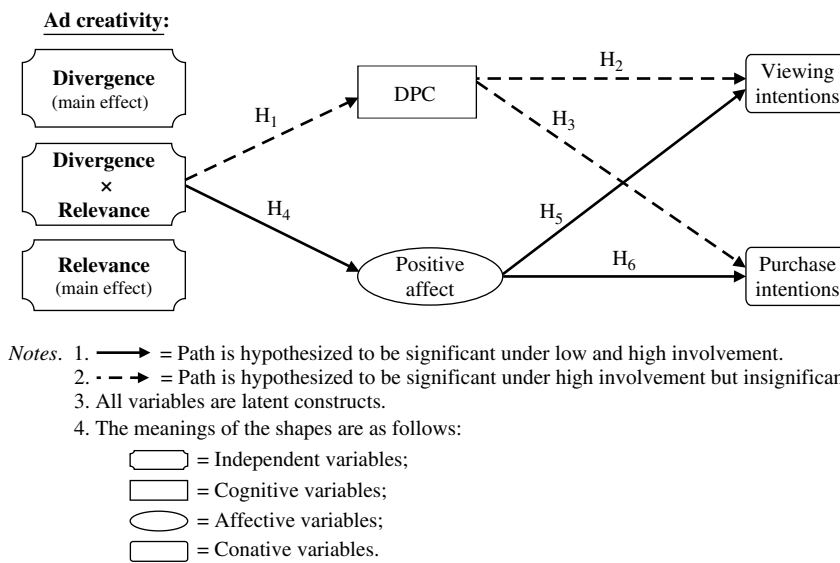
Modeling Cognitive Impact of Ad Creativity

Ad Creativity → DPC. It is hypothesized that creative ads increase the consumer's DPC for brand messages, which produces a more curious and open-minded information processing approach (where consumers are willing to consider more brand information before a judgment is made). This hypothesis is based on the fact that creative ads are divergent (by definition) and thus should be more "ambiguous" in the sense that consumers cannot apply their current knowledge to provide a coherent explanation (Berlyne 1971, McQuarrie and Mick 1992). In addition, because of divergence, creative ads often violate consumer expectancies and thus do not fall into a predetermined pattern or structure (Heckler and Childers 1992, McQuarrie and Mick 1992).

Either ambiguity or incongruity can trigger the consumer's sense-making efforts and thus postpone the desire for closure toward the ad message. If ambiguity and incongruity do not exist (i.e., low-creative ad), consumers will tend to quickly reach closure toward the ad message by applying their original attitude (i.e., "seize and freeze"). The existence of ambiguity and incongruity breaks such closure by starting a new information-processing sequence, which could change the consumer's responses. Thus, as shown in Figure 1, the model predicts that (H_1) exposure to creative ads will increase the consumer's DPC.

DPC → Viewing Intentions. Viewing intentions represent a consumer's willingness to watch the ad again after initial exposure. Measuring viewing intentions is important because technology gives consumers the ability to skip or "zap" unwanted commercials. When ads are creative, desire for closure is postponed (H_1), making consumers more open-minded information processors (Kruglanski and Webster 1996). They are less likely to be constrained

Figure 1 Structural Model



by their existing hypotheses and more likely to experiment with new information about the advertised product. Furthermore, these consumers are likely to engage in deeper processing, which should elicit more brand-related curiosity and a cognitive-based intention to review the ad (to reduce curiosity). Thus, as shown in Figure 1, the model predicts that (H_2) activating DPC produces more favorable ad reviewing intentions.

DPC → Purchase Intentions. Researchers have found that when an individual's need for closure is high, they not only want to reach a conclusion as soon as possible ("seize") but also they are motivated to hold this conclusion ("freeze") (Kruglanski and Webster 1996). Thus, it is very difficult to change brand judgments when consumers have a high need for closure. By contrast, when DPC is activated, consumers are less likely to use defensive mechanisms (e.g., counterarguing) when processing ads (Jacks and Cameron 2003). Hence, consumers are likely to generate more favorable attitudes and intentions.

Because attitudes and intentions are often correlated in cross-sectional studies, we examine the variable closest to purchase. Specifically, consumers' willingness to take an open approach and produce fewer negative reactions, ultimately, should result in more favorable purchase intentions toward the brand. Thus, as shown in Figure 1, the model predicts that (H_3) activating DPC produces more favorable purchase intentions.

Modeling Affective Impact of Ad Creativity

Ad Creativity → Positive Affect. Processing creative ads should be deemed as intrinsically interesting

and enjoyable because consumers have the internal dispositions to appreciate divergent stimuli (Smith and Yang 2004). Indeed, novelty seeking (Finger and Mook 1971), incongruity seeking (Hunt 1963), and variety seeking (Steenkamp and Baumgartner 1992) are all examples of consumers seeking divergent stimuli. Thus, gratifying the consumer's desire for divergence will bring satisfaction or positive affect. In addition, solving ambiguity (which is often produced by creative ads because of their divergence) can produce positive affect (Peracchio and Meyers-Levy 1994). Thus, as shown in Figure 1, the model predicts that (H_4) perceived ad creativity is directly related to positive affect.

Positive Affect → Viewing Intentions. If creative ads do produce significantly more positive affect (H_4), they should also produce higher reviewing intentions for the ad. Specifically, if consumers enjoy the ad or think it is "cool," they should be more willing to see it again. Thus the model predicts (as shown in Figure 1) that (H_5) positive affect is directly related to ad viewing intentions.

Positive Affect → Purchase Intentions. The presence of positive affect (H_4) should result in the generation of more favorable brand cognitions, more favorable brand attitudes, and ultimately, more favorable purchase intentions. This is because affective states are known to impact the valence of thoughts and product evaluations generated by consumers. For example, Peracchio and Meyers-Levy (1994) found that when consumers successfully resolved brand ambiguity, the positive affect was transferred into more favorable brand evaluations. Thus the model predicts (as shown in Figure 1) that (H_6) positive affect is directly related to purchase intentions.

The Moderating Role of Consumer Involvement

Consumer involvement reflects the amount of brand evaluation that occurs and can moderate the effects of ad exposure on processing and response variables (e.g., MacInnis and Jaworski 1989, McQuarrie and Mick 2003, Peracchio and Meyers-Levy 1994). In this study, involvement is expected to moderate the importance of the cognitive effects from ad exposure. Specifically, it is when the consumers' level of involvement with advertising is high that they are critical judges of ad claims (because of its obvious vested interest), so they engage in considerable source derogation and counterargumentation (Wright 1973). In this scenario, the effects of increasing DPC should impact the dependent variables.

Conversely, when consumers have a low level of involvement with advertising, they will allocate significantly fewer cognitive resources to evaluating the ad (and brand) and lack the motivation to critically evaluate the ad message (Krugman 1965). In this scenario, triggering a DPC (through ad creativity) should have little impact because cognitive effects of exposure are minimal. Thus, if the conceptualization of DPC is accurate, the effects of triggering it through ad creativity should be significant when consumers are cognitively engaged with the ad but lose significance when they are not.

Conversely, affective influences generated by creative ads do not rely on cognitive processing, so they should be unaffected by the consumer's level of involvement. Accordingly, we hypothesize an interaction effect (H_7) such that creative ads will have significant affective impact under both low and high involvement conditions, while cognitive effects (i.e., DPC) will be significant only under high involvement (see Figure 1).

Method

Two pretests and three main studies were conducted to test the proposed structural framework. Pretest 1 selected the ad stimuli and examined them on several covariates for equivalence. Pretest 2 tested the validity of the measurement model and showed preliminary evidence for the proposed structural model (i.e., H_1 – H_6). Study 1 replicated Pretest 2 under high-involvement conditions and examined whether the cognitive effects (DPC) disappear under low involvement conditions (H_7). Study 2 demonstrated that the model had predictive validity over and beyond "attention effects," while Study 3 examined the causal relationship between DPC and the intentions variables and ruled out the effects of NFC.

Pretest 1

A pretest was conducted to select ads from the four different combinations of creativity—divergence (high/low) and relevance (high/low). Real TV ads were used to achieve a strong manipulation of ad divergence (Smith et al. 2007) and to enhance external validity (Pieters et al. 2002, Till and Baack 2005). Using accepted practice (see Smith et al. 2007, Till and Baack 2005 for a description), respondents rated the creativity of ads from two pools: 50 creative ads (award winners for creativity) and 50 "average" TV ads (randomly recorded from four major networks).

Two hundred and sixty respondents evaluated one TV commercial randomly chosen from the pools using (a) the five dimensions of divergence (originality, flexibility, synthesis, elaboration, and artistic value) and (b) the two dimensions of relevance (ad-to-you and brand-to-you) (Smith et al. 2007). These ratings were then used to select 10 ads for each of the four cells.³ Pretest results show that (a) the divergent ads group had higher ratings on divergence ($M_{\text{divergent ads}} = 4.59$ versus $M_{\text{low-divergence ads}} = 4.02$, $F_{(1,99)} = 7.19$, $p < 0.01$), and (b) the relevant ads group had higher ratings on relevance ($M_{\text{relevant ads}} = 3.75$ versus $M_{\text{low-relevance ads}} = 3.02$, $F_{(1,99)} = 6.16$, $p < 0.01$).

In addition, it was important to ensure that the four groups of ads were equivalent on other key variables so results can be attributed only to ad creativity. Accordingly, respondents answered questions about brand familiarity, production quality, argument strength, level of objectivity, and persuasive intent. Results showed that all four groups of ads were equivalent on all of these covariates (all p values > 0.10).

Pretest 2

A second pretest was conducted to show validity of the measurement model and provide preliminary evidence for the proposed cognitive and affective paths (i.e., H_1 – H_6). One hundred and eighty respondents were recruited and were offered extra credit for participating. This study used a 2 (divergence: high/low) by 2 (relevance: high/low) between-subjects design.

Procedure. Respondents were randomly assigned to one of four treatment conditions and then randomly assigned to one of the 10 ads in that cell (selected

³ High divergence and high relevance: ESPN, FedEx, Netflix, Nordstorm, Pacific Bell, MasterCard, HP, BMW, Honda, Bridgestone.

High divergence and low relevance: E*TRADE, Gateway, Adidas, Amazon, Budget, Schwab Financing, Levi's, KFC, Goodwill.

Low divergence and high relevance: AAA Insurance ($\times 3$), Allstate, Colgate, Honda ($\times 2$), Golden Corral, Verizon Wireless, Applebee's.

Low divergence and low relevance: Adidas, Acura ($\times 2$), Alka-Seltzer, Honda, Icy Hot, Fifth Third Bank, McDonalds, Nicoderm, Power Rangers.

from Pretest 1). They received instructions and then viewed a segment of an entertainment news program, which included three ads. After the program, respondents completed a questionnaire (see the appendix) containing (a) processing measures, (b) intention measures, (c) covariates and manipulation check measures, and (d) demographic variables. Finally, respondents were thanked and debriefed.

Stimuli. The TV commercials were embedded in a segment from *Entertainment Tonight*. Respondents saw (a) two and a half minutes of the program, followed by (b) an ad pod, which contained three TV commercials (the ad pod included two filler ads and then the target ad), followed by (c) another 30 seconds of entertainment news, ending with the program sign-off.

Measurement Model. Testing the model (Figure 1) involved a two-step procedure (Anderson and Gerbing 1988). In the first step, a measurement model was examined to test the validity of the measurement for the constructs. Because overall creativity and DPC are formative constructs (i.e., indicators not necessarily correlated), confirmatory factor analysis was performed only on the reflectively measured constructs (positive affect, purchase intentions, and viewing intentions) (Jarvis et al. 2003). See Table 1 for a summary of factor intercorrelations and reliability estimates, and see Table 2 for a summary of the individual factor loadings. In terms of overall fit, the chi-squared statistic was $64.41_{(df=32)}$, $p < 0.01$. The comparative fit index (CFI) was 0.99, the normed fit index (NFI) was 0.97, and the goodness-of-fit index was 0.94. These indices showed that the confirmatory factor analysis had a good fit.

The next step in the evaluation of the measurement model was to check construct validity and discriminant validity. As shown in Table 1, the measurement model showed evidence of construct validity as (a) average variance extracted ($\rho_{vc(\eta)}$) estimates ranged from 0.64 to 0.93, and (b) *construct reliabilities* were also high (α values ranged from 0.83 to 0.97). Discriminant validity was achieved because (a) for every pair of constructs, the intercorrelation was significantly less than 1.0 ($p < 0.05$) (Anderson and Gerbing 1988), and (b) the average shared variance that could be explained by the posited underlying construct was more than the squared correlations between this construct and any other construct (Fornell and Larcker 1981).

Table 1 Construct Intercorrelations and Reliability Estimates in the Measurement Model

Measures	α	$\rho_{vc(\eta)}$	1	2	3
1. Positive affect	0.87	0.64	1.00		
2. Viewing intentions	0.97	0.93	0.66	1.00	
3. Purchase intentions	0.83	0.64	0.52	0.56	1.00

Table 2 Completely Standardized Factor Loadings for the Measurement Model

Measures	Means	Standard deviation	Factor loadings
Positive affect			
Interested	2.98	1.17	0.87
Inspired	2.09	1.04	0.72
Excited	2.46	1.25	0.84
Attentive	3.06	1.20	0.76
Viewing intentions			
Very Unlikely... Very likely	3.79	1.96	0.94
Very Improbable... Very probable	3.09	1.94	0.98
Very Impossible... Very possible	3.98	1.87	0.96
Purchase intentions			
Try out the advertised brand.	3.53	1.82	0.87
Purchase the advertised brand.	2.81	1.71	0.85
Pay a higher price for this brand.	2.63	1.55	0.66

Test of Structural Relationships. Next, the hypothesized structural relationships were tested, including the main effects and covariate (production quality⁴), as shown in Figure 2. Following Smith et al. (2007), it was expected that the interaction between divergence and relevance would be the best representation of overall ad creativity. Therefore we use the $D \times R$ interaction to represent the effect of advertising creativity (although the main effects are also reported). The hypothesized structural relationships were tested using maximum likelihood method in LISREL 8.7.⁵ The overall fit of the theoretical model was very good. The chi-squared statistic = $136.84_{(df=74)}$, $p < 0.01$, CFI = 0.98, NFI = 0.97, and root mean square error of approximation (RMSEA) = 0.07.

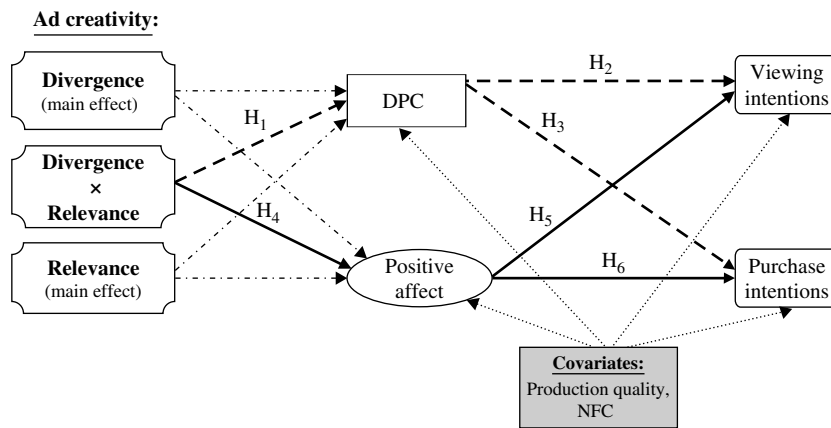
The results of individual hypothesis testing (Table 3) showed that the proposed structural model received

⁴ Including brand familiarity as a covariate did not change the pattern of results. However, it still could be argued that the experimental ads might differ on factors other than perceived creativity (and the seven covariates examined), which is a limitation of this research.

⁵ To establish scale of measurement of the *reflectively* measured constructs (i.e., positive affect, viewing intentions, and purchase intentions), one of the factor loadings for each underlying construct was fixed at 1.0. All exogenous variables were free to covary.

The scores and error terms for the *formatively* measured constructs are determined as follows. An overall scale score for divergence was created by averaging its five items. An overall scale score for relevance was created by averaging its four items. An interaction term was created by multiplying divergence and relevance. A scale score for DPC was obtained by averaging its eight items. The error terms of divergence and relevance were fixed at $(1 - \alpha) \times \text{variance}$. The error term of the interaction term was fixed at a level of $0.3 \times \text{variance}$ (assuming the α is 0.7). Note that the α of 0.7 was assumed to be lower than that of either of its individual components (0.71 for divergence, 0.94 for relevance), because Busemeyer and Jones (1983) demonstrated that the reliability of a multiplicative term is lower than that of its component terms. The error terms for production quality and DPC were fixed at $\text{variance} \times (1 - \alpha)$ level.

Figure 2 Structural Model with Covariates



- Notes. 1. —→ = Path is hypothesized to be significant under low and high involvement.
2. - - -→ = Path is hypothesized to be significant under high involvement but insignificant under low involvement (H₇).
3. ····→ = Main effects (not hypothesized).
4. ·····→ = Controlled as a covariate
5. All variables are latent constructs.

very good support. Specifically, perceived ad creativity had a significant impact on both processing variables (DPC and positive affect), which, in turn, produced significant effects on response variables (viewing and purchase intentions).

Study 1

Study 1 was designed to (a) replicate the findings from Pretest 2 under high-involvement conditions, (b) test whether cognitive effects become nonsignificant in low-involvement conditions as proposed

Table 3 Test of Structural Model (Pretest 2, Studies 1 and 2)

Model path	Hs	Pretest 2		Study 1		Study 2	
		β , (z)	p	β , (z)	p	β , (z)	p
Divergence (D), Relevance (R), Involvement (I) → DPC							
D → DPC	H ₁	0.36, (3.72)	<0.001	−0.03, (0.18)	n.s.	−0.06, (0.52)	n.s.
R → DPC		−0.06, (−0.65)	n.s.	−0.07, (0.38)	n.s.	−0.11, (0.83)	n.s.
D × R → DPC		0.25, (5.05)	<0.001	0.38, (1.65)	<0.050	0.30, (2.02)	<0.030
I → DPC		—	—	0.11, (0.58)	n.s.	—	—
D × I → DPC		—	—	−0.15, (0.65)	n.s.	—	—
R × I → DPC	H ₇	—	—	−0.27, (1.17)	n.s.	—	—
D × R × I → DPC		—	—	0.50, (1.96)	<0.025	—	—
Divergence (D), Relevance (R), Involvement (I) → Positive Affect (PA)							
D → PA	H ₄	0.15, (2.07)	<0.020	0.16, (1.10)	n.s.	0.02, (0.17)	n.s.
R → PA		0.34, (4.40)	<0.001	−0.16, (1.15)	n.s.	−0.16, (1.37)	n.s.
D × R → PA		0.12, (3.10)	<0.001	0.38, (2.10)	<0.020	0.47, (3.43)	<0.001
I → PA		—	—	−0.02, (0.17)	n.s.	—	—
D × I → PA		—	—	−0.06, (0.34)	n.s.	—	—
R × I → PA	H ₇	—	—	−0.16, (0.89)	n.s.	—	—
D × R × I → PA		—	—	0.14, (0.68)	n.s.	—	—
DPC → Viewing Intentions	H ₂	0.22, (3.05)	<0.001	0.19, (3.27)	<0.001	0.20, (2.38)	<0.010
DPC → Purchase Intentions	H ₃	0.17, (1.80)	<0.040	0.15, (1.88)	<0.030	0.23, (2.68)	<0.010
Positive Affect → Viewing Intentions	H ₅	0.49, (6.46)	<0.001	0.71, (8.49)	<0.001	0.37, (4.54)	<0.001
Positive Affect → Purchase Intentions	H ₆	0.49, (5.11)	<0.001	0.57, (5.58)	<0.001	0.44, (5.03)	<0.001
Divergence, Relevance → Attention							
Divergence → Attention		—	—	—	—	0.35, (2.84)	<0.010
Relevance → Attention		—	—	—	—	0.13, (0.95)	n.s.
Divergence × Relevance → Attention		—	—	—	—	−0.18, (1.17)	n.s.
Attention → Viewing Intentions		—	—	—	—	0.15, (1.83)	<0.040
Attention → Purchase Intentions		—	—	—	—	0.06, (0.69)	n.s.

Notes. The hypothesized paths are boldfaced. The statistics reported are based on one-tailed tests. n.s., not significant.

in H_7 , and (c) examine whether the model still has predictive validity after controlling for the effects of NFC as a covariate.

Respondents and Experimental Design

One hundred and fifty-one respondents were recruited and given extra credit for participating. The experiment was a between-subjects design with three independent variables: divergence (high/low), relevance (high/low), and ad processing involvement (high/low).

Procedure

The procedure was similar to Pretest 2 except for (a) the manipulation of involvement (McQuarrie and Mick 2003), and (b) the inclusion of NFC as a covariate. In advertising, brand involvement refers to the amount of brand evaluation performed (MacInnis and Jaworski 1989), while advertising involvement refers to whether consumers focus on the ad or program content (Laczniak et al. 1989). Accordingly, for the high ad involvement condition, respondents were informed that the Department of Marketing was conducting research on TV commercials. They were instructed to consider the ads in the TV program carefully and that they should be prepared to answer questions about the ads. For the low ad involvement condition, respondents were told that the Department of Communication was conducting research on the appropriateness of an entertainment program directed toward college students. They were instructed to pay close attention to the program.

After collecting responses to the manipulation checks and dependent variables, the main covariates (production quality and NFC) were measured. These items were placed at the end of the questionnaire so as not to influence answers to the dependent variables.

Measures

All the measures are the same as those used in Pretest 2 (see the appendix) with the following exceptions. First, to control NFC, we included five 5-point Likert scale items (e.g., “I prefer to do something that challenges my thinking abilities rather than something that requires little thought,” and “I prefer complex to simple problems”; $\alpha = 0.63$) (Cacioppo et al. 1996). Second, two items were included to serve as manipulation checks for ad involvement (McQuarrie and Mick 2003). Respondents were asked to indicate the extent to which they paid attention to the ads while watching the program (anchored by “mostly attended to the ads/mostly attended to the TV program” and “mostly ignored the TV program/mostly ignored the ad”) (reverse coded) ($r = 0.72$, $p < 0.01$).

Analysis and Results

Manipulation Checks. Empirical results showed that divergence, relevance, and involvement were all successfully manipulated.⁶

Hypothesis Testing. To examine the proposed cognitive and affective effects of ad creativity (H_1 – H_6) and the moderating effect of involvement (H_7), dummy variable analysis was conducted on the data with four causally related latent dependent variables: DPC, positive affect, viewing intentions, and purchase intentions (MacKenzie 1986). Exogenous variables of the model include all main effects (divergence dummy, relevance dummy, and involvement dummy), the two-way interactions, and the three-way interaction. In addition, for control purposes, NFC and production quality were included in the analysis as covariates.

The hypothesized structural relationships were tested using model setups similar to Pretest 2 in LISREL 8.7. The overall fit of the theoretical model was very good. The chi-squared statistic was 187.12 ($df=117$), $p < 0.01$, CFI = 0.98, NFI = 0.95, and RMSEA = 0.06. The parameter estimates for the model are shown in Table 3 and replicate the findings from Pretest 2 (H_1 – H_6).

According to H_7 , involvement should moderate the effects of ad creativity on DPC, so there should be a significant three-way interaction of divergence, relevance, and involvement. Results showed some significant two-way interactions, but most important, the hypothesized three-way interaction of divergence, relevance, and involvement was significant for DPC ($\beta = 0.50$, $z = 1.96$, $p < 0.03$). Follow-up testing of contrasts also revealed patterns consistent with H_7 . Specifically, only under high (versus low) involvement conditions was the $D \times R$ interaction term significant for DPC ($F_{(1, 143)} = 3.62$; $p < 0.03$).⁷

⁶ Results showed that the divergent ads group had higher ratings on divergence ($M_{\text{divergent ads}} = 4.58$ versus $M_{\text{low-divergent ads}} = 3.72$, $F_{(1, 149)} = 21.99$, $p < 0.01$), as intended. In addition, the relevant ads group had higher ratings on relevance ($M_{\text{relevant ads}} = 4.05$ versus $M_{\text{low-relevant ads}} = 3.09$, $F_{(1, 149)} = 13.41$, $p < 0.01$), as intended. Note that the manipulation of divergence did not affect relevance ratings and the manipulation of relevance did not affect divergence ratings. Finally, respondents assigned to the high-involvement condition paid more attention to the TV commercials ($M_{\text{high involvement}} = 7.48$ versus $M_{\text{low involvement}} = 6.56$, $F_{(1, 149)} = 11.78$, $p < 0.01$), as intended. Thus our manipulations of the independent variables were successful.

⁷ Specifically, under high involvement, the main effect of divergence was significant when the ads were relevant ($M_{\text{divergent ads}} = 4.21$ versus $M_{\text{low-divergent ads}} = 3.51$, $F_{(1, 143)} = 5.75$; $p < 0.01$) but not when the ads were low in relevance ($M_{\text{divergent ads}} = 3.57$ versus $M_{\text{low-divergent ads}} = 3.67$). Similarly, the main effect of relevance was significant when the ads were divergent ($M_{\text{relevant ads}} = 4.21$ versus $M_{\text{low-relevant ads}} = 3.57$, $F_{(1, 143)} = 4.49$; $p < 0.02$) but not when the ads were low in divergence ($M_{\text{relevant ads}} = 3.51$ versus $M_{\text{low-relevant ads}} = 3.67$).

H₇ also suggests that involvement should not moderate the effects of ad creativity on positive affect, so only a two-way interaction ($D \times R$) is hypothesized. Results showed the three-way interaction of divergence, relevance, and involvement was not significant on positive affect ($F < 1$), as expected. However, the two-way interaction between divergence dummy and relevance dummy on positive affect was significant ($\beta = 0.38$, $z = 2.10$, $p < 0.02$), as hypothesized. Follow-up testing of contrasts also revealed patterns consistent with H₇.⁸ This shows that the affective paths were not changed under different levels of involvement, supporting H₇.

Summary

Study 1 replicated the findings in Pretest 2 for H₁–H₆ under high-involvement conditions. Also, H₇ was supported because cognitive paths became insignificant under low ad involvement, whereas both affective and cognitive paths were significant under high ad involvement. Note that ad creativity has a significant affective impact regardless of the level of involvement, suggesting a major role for emotions in explaining the effects of ad creativity. In addition, these effects were found even when NFC was used as a covariate.

Study 2

Study 2 was designed to address two major issues. First, as claimed in the introduction section, the model should show predictive validity over and beyond the “attentional effects” of advertising creativity. Therefore, attention measures were collected in Study 2 and included in the analysis. Second, it is possible that the “entertainment news program” in which the ads were embedded could have exaggerated the affective effects in Study 1. Therefore, in Study 2, respondents are not exposed to the entertainment program—only the stimulus ads.

Procedure and Measures

One hundred and sixty-one respondents were given extra credit for participating. The experiment was a between-subjects design with two independent variables: divergence (high versus low) and relevance (high versus low). The same ads were used as in previous studies.

⁸ Testing of contrasts showed that the main effect of divergence on positive affect was significant when the ads were relevant ($M_{\text{divergent ads}} = 3.04$ versus $M_{\text{low-divergence ads}} = 1.88$, $F_{(1,143)} = 37.22$; $p < 0.001$) but not when the ads were low in relevance ($M_{\text{divergent ads}} = 2.43$ versus $M_{\text{low-divergence ads}} = 2.22$). Similarly, the main effect of relevance was significant when the ads were divergent ($M_{\text{relevant ads}} = 3.04$ versus $M_{\text{low-relevance ads}} = 2.43$, $F_{(1,143)} = 10.26$; $p < 0.001$) but not when the ads were low in divergence ($M_{\text{relevant ads}} = 1.88$ versus $M_{\text{low-relevance ads}} = 2.22$).

The procedure was similar to Pretest 2 except that the ads were not inserted into the entertainment program. Instead, respondents viewed only the target ad and then answered questions related to (a) processing and intention variables, (b) attention, (c) NFC, and (d) demographic variables. The only new measures in Study 2 were two Likert scales used to measure respondents’ attention to the ad and brand (“I paid attention to the brand message communicated in the ad; I did not pay too much attention to the ad” (reverse coded)). The two items were averaged ($r = 0.64$, $p < 0.01$) to represent “attention to the ad.”

Analysis and Results

Manipulation Checks. Empirical results showed that divergence and relevance were both successfully manipulated.⁹

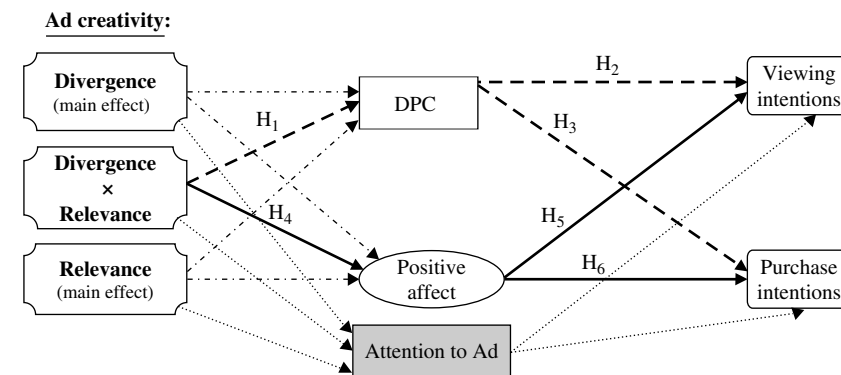
Model Testing. The proposed structural model (see Figure 3) was examined using LISREL 8.7, and the overall fit was good.¹⁰ The results of the individual hypotheses are shown in Table 3. Overall, the pattern of hypothesized paths (H₁–H₆) was consistent with those in Pretest 2 and Study 1. The results indicate that the model still shows predictive validity even after controlling for attention, providing support that the model is able to capture the variance of ad creativity above and beyond “attention effects.”

The test of the linkages to and from attention in the structural model had the following results. Regarding the antecedents of attention, the only significant predictor was the main effect of divergence ($\beta = 0.35$, $p < 0.01$), but not relevance ($\beta = 0.13$, n.s.) or the $D \times R$ interaction ($\beta = -0.18$, n.s.). This result was understandable given that divergent ads tend to attract consumers’ attention. In terms of the consequences, attention did have a significant effect on viewing intentions ($\beta = 0.15$, $p < 0.04$) but not on purchase

⁹ Results showed that the divergent ads group had higher ratings on divergence ($M_{\text{divergent ads}} = 4.31$ versus $M_{\text{low-divergent ads}} = 3.36$, $F_{(1,159)} = 38.40$, $p < 0.01$), as intended. In addition, the relevant ads group had higher ratings on relevance ($M_{\text{relevant ads}} = 4.01$ versus $M_{\text{low-relevant ads}} = 3.26$, $F_{(1,159)} = 9.96$, $p < 0.01$), as intended. Note that the manipulation of divergence did not affect relevance ratings and the manipulation of relevance did not affect divergence ratings. Thus the manipulations of the independent variables were successful.

¹⁰ The model setup was very similar to that of Pretest 2 with the following exception: although divergence, relevance, and their interaction were used to represent ad creativity, we operationalize them differently by using dummies of these variables. We did this to examine whether the manipulations of creative ads themselves would have a similar effect on creativity as the factor scores used previously. In terms of overall fit, the chi-squared = 206.64 ($df = 84$), $p < 0.01$, and the fit indices showed an acceptable fit (CFI = 0.95, NFI = 0.92, RMSEA = 0.09).

Figure 3 Structural Model with Attentional Effects



- Notes. 1. —→ = Path is hypothesized to be significant under low and high involvement.
 2. - - -> = Path is hypothesized to be significant under high involvement but insignificant under low involvement (H₇).
 3. ····→ = Main effects (not hypothesized).
 4.→ = Paths assumed by traditional attention model.
 5. NFC was controlled in analysis but is not shown to reduce clutter.

intentions ($\beta = 0.06$, n.s.). Overall, this study showed that attention effects cannot explain the data.

Test of Mediation. We next tested whether the effect of creativity ($D \times R$) on the intention variables was totally mediated by DPC and positive affect as implied in the model. Specifically, as recommended by Iacobucci et al. (2007), we fitted one structural equation model in which the direct effects [Ad Creativity ($D \times R$) → Ad Viewing Intentions] and [Ad Creativity ($D \times R$) → Purchase Intentions] and the hypothesized indirect effects (i.e., H₁–H₆) were fit simultaneously so as to estimate each effect while controlling for the other. Neither one of the added direct paths was significant (p values > 0.10), showing support for the model. In addition, to make sure the indirect (mediated) effects were significant, Sobel's test of mediation was conducted (Iacobucci et al. 2007). Results show that all of the indirect mediation effects were supported ([$D \times R \rightarrow DPC \rightarrow$ Viewing Intentions]: $z = 1.67$, $p < 0.05$; [$D \times R \rightarrow DPC \rightarrow$ Purchase Intentions]: $z = 1.74$, $p < 0.04$; [$D \times R \rightarrow$ Positive Affect → Viewing Intentions]: $z = 2.60$, $p < 0.01$; [$D \times R \rightarrow$ Positive Affect → Purchase Intentions]: $z = 2.70$, $p < 0.01$). These results indicate that the effects of ad creativity on intentions were fully mediated by DPC and positive affect rather than some alternative mechanism that is not accounted for by the model.

Study 3

Studies 1 and 2 have demonstrated that viewing creative ads triggers an open-minded processing set (high involvement) and positive affect (high and low

involvement), which, in turn, leads to more favorable viewing and purchase intentions. The first two studies have supported the causal links between [Ad Creativity → DPC] (H₁) and [Ad Creativity → Positive Affect] (H₄). In addition, the links between [Positive Affect → Intentions] (H₅ and H₆) have already been established in previous research (see, e.g., Zuwerink and Devine 1996). However, the causality between [DPC → Viewing Intentions] (H₂) and [DPC → Purchase Intentions] (H₃) still needs to be proven. Accordingly, Study 3 was designed to provide a direct test of H₂ and H₃.

Respondents and Experimental Design

Forty-one respondents received extra credit for participating in the study. The experiment was a one-way analysis of variance (ANOVA) design with DPC (low/high) as the independent variable.

Stimuli

As noted above, DPC is expected to influence consumer processing most when they are in a defensive information processing mindset. Accordingly, we used an experimental treatment that has been shown to create similar effects in the target population (Petty and Cacioppo 1986). Specifically, respondents (college students) were told that they would be presented with some information about an exam policy that is under consideration by the university and that they will have a future vote on the issue. Respondents in both experimental conditions were exposed to identical print ads, which included five claims promoting comprehensive exams (Petty and Cacioppo 1986): comprehensive exams attract promising students, enhance

school reputation, improve grades, make us part of a national trend, and increase starting salaries.

Procedure

Respondents were randomly assigned to one of two treatment conditions. DPC was manipulated by varying the instructions respondents received before viewing the ad promoting the comprehensive exam. In the high DPC condition, respondents received instructions that they should consider both positive and negative aspects before reaching a conclusion. In the low DPC condition, respondents received instructions that they should form evaluations based on their initial reaction and reach a conclusion as soon as possible.

After viewing the ad, respondents were asked to provide their ad reviewing intentions and behavioral (voting) intentions using the same measures from Studies 1 and 2 (with slight adaptations). In addition, the NFC scales used in prior studies were administered after the intentions measures. Finally, respondents were thanked and debriefed.

Analysis

Manipulation Checks. A one-way ANOVA performed on the manipulation check measures of DPC showed that there was a significant main effect of the treatment conditions ($F_{(1, 39)} = 6.08, p < 0.01$): respondents assigned to the high DPC condition reported significantly higher ratings of DPC ($M_{\text{high DPC}} = 4.58$) than the low DPC condition ($M_{\text{low DPC}} = 3.60$).

Intentions. To test the main hypothesis that activating DPC should lead to more favorable intentions, the same one-way ANOVA was conducted on the intention measures. Results showed a significant main effect of DPC on viewing intentions ($F_{(1, 39)} = 6.51, p < 0.01$) and voting intentions ($F_{(1, 39)} = 5.29, p < 0.02$). In addition, paired comparisons indicated that both intentions were significantly higher in the high DPC condition than in the low DPC condition (viewing intentions: $M_{\text{high DPC}} = 4.52, M_{\text{low DPC}} = 3.24$; voting intentions: $M_{\text{high DPC}} = 4.05, M_{\text{low DPC}} = 2.75$). These results directly support the hypothesized model links between DPC and reviewing (H_2) and purchase intentions (H_3).

NFC. To examine whether the DPC manipulation had an impact on respondents' NFC, the same one-way ANOVA was run on NFC scores. There was no significant difference ($F < 1$), indicating DPC and NFC are largely independent constructs.

Conclusion

Contributions

This research investigated how and when advertising creativity impacts consumer processing and response.

To examine *how* ad creativity works, two specific processing variables were identified and investigated. The results highlighted a specific cognitive mechanism—DPC—that can explain how ad creativity triggers increased open-mindedness and curiosity. This is an important finding because consumers are often skeptical (close-minded) when processing information from a vested-interest source, so they are unlikely to change existing beliefs or attitudes based on ad claims. Accordingly, any strategy that can reduce resistance to persuasion and make consumers more open-minded can have a significant impact on consumer ad viewing intentions and brand purchase intentions (as shown here).

Another major variable, positive affect, also was stimulated by exposure to creative ads. This finding is important because affective reactions are typically unfiltered and often have strong impact on processing and response. Indeed, it seems likely that the ability of creative ads to trigger both cognitive and affective effects helps explain the systematic and significant advantage found for creative ads in recent research (Smith et al. 2007).

To help unravel the story of *when* advertising creativity works, ad involvement was experimentally manipulated to examine whether it would moderate the cognitive effects of exposure to creative ads. Results showed that when consumers have low ad involvement, cognitive processing is minimal and DPC effects are insignificant. However, ad creativity still has a favorable impact on consumer processing and response by triggering positive emotions that transfer to intentions. This is an important finding because it shows that ad creativity can have significant effects even when consumer involvement is low. When ad involvement is high, affective effects still occur but are augmented by cognitive effects triggering a desire to postpone cognitive closure, thus facilitating persuasion. Note that consumers' involvement in advertising is often highest right before product purchase, so the effects of DPC on persuasion can come at a critical point in the purchase process. In addition, few variables have been shown to increase both open-mindedness and positive affect in a persuasion context.

Managerial Implications

This research also holds significant implications for marketing and advertising managers. With the continuing advance of technology (e.g., digital video recorders (DVRs)), consumers are more powerful than ever before in controlling their exposure to marketing communications. Indeed, recent research by Nielsen Media Research Inc., showed that 87% of households with DVRs skipped commercials (Grover and Fine 2006). However, our results show that ad creativity

can significantly increase the consumer's intention to view the ad again—making zapping less likely. Note that ad creativity not only increases viewing intentions but also produces more favorable purchase intentions, so repeated viewings can be expected to have powerful effects. Therefore, creativity can play an important role in determining ad effectiveness as technology continues to develop.

Ad creativity is considered under the control of marketing managers because they routinely give guidelines to advertising professionals about the levels of divergence and relevance they want in their marketing communications. Often, clients of advertising agencies seek a safe or conservative approach that they feel comfortable with (Smith and Yang 2004). Although this strategy is certainly appropriate in some situations, this research shows that persuasion via vested-interest sources has much to gain from creativity. This is especially true whenever consumer resistance to persuasion is high or the source's credibility is perceived to be low—and both are often the case in marketing.

Historically, advertising textbooks have emphasized that creative ads stand out in clutter and therefore receive more attentional resources from potential consumers. However, our findings show that the traditional "attention view" cannot fully explain the effects of ad creativity. For example, a consumer may carefully attend to an ad message, but this does not guarantee that the message will be believed or acted on. In many cases, consumers discount and counterargue ad claims because the source has a vested interest. Thus, attention is a necessary but insufficient condition to achieve persuasion. Importantly, this research shows that creative ads directly affect persuasion by increasing the DPC, which makes consumers more curious and open-minded. Moreover, these effects are translated into more favorable brand intentions.

Thus, marketers and advertisers should be aware that grabbing attention is not the only goal of creative ads. In addition, ads should be designed to maximize DPC (which not only makes the ad the center of attention but also shows the product in a more favorable light). This goal can be achieved by ad executions that (a) are divergent on any or all of the five divergence factors (Smith et al. 2007), (b) are ambiguous or incongruent and build up suspense, or (c) prevent consumers from immediately applying their original impressions when making judgments. "Teaser" campaigns are probably the most common examples of this technique.

Alternatively, managers and advertisers can leverage positive affect in producing desirable ad responses. Traditionally, techniques like humor, sentimental images, sex appeal, emotional music, etc.,

have been used to arouse strong feelings from consumers. Given the robust finding in this research, creativity should join the list of variables that managers can use to trigger strong positive affect in potential customers.

The finding that consumer involvement moderates the cognitive effects of creative ads also holds important implications. Advertisers can design different ad campaigns to target high and low involvement consumer segments. When targeting high-involvement consumers (e.g., health-conscious people watching infomercials about fitness equipment or sports fans watching the Super Bowl), the advertisers' goal is to trigger viewers' curiosity about the advertised brand so that they will not immediately apply their prior impressions. This suggests the use of divergence factors that are most closely related to cognition like elaboration and synthesis. When targeting low-involvement consumers (e.g., people who are interested in TV programming but not the ads), the advertiser's goal is to elicit more positive affect. This suggests the use of divergence factors that are most closely related to affect like artistic value and originality.

Future Research

Despite its importance, creativity in advertising remains understudied. For instance, research is needed that expands the respondent pool and tests for ad creativity effects across different segments of consumers. Over time, moderating variables are likely to emerge and may include demographic variables like gender, cultural background, age, political affiliations and/or psychographic variables like cognitive style or need for uniqueness.

Researchers also need to compare the persuasive impact of creativity versus other—long-standing—traditions in advertising strategy. A case in point is political advertising, which, in the United States, has become intensely negative over time. Apparently, this trend has occurred because negative information has more impact than positive information (Mizerski 1982). It would be interesting to compare the cognitive and affective impact of negative political ads versus creative political ads. This research suggests that creative ads could be more persuasive, while avoiding the significant negatives that go with political attacks (i.e., increasing the candidate's "unfavorable" rating, alienating the electorate, low voter turnout, etc.).

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Appendix. Interval Scales Used for Constructs

Variable	Scales	Type	Precedents/Sources of the adaptation
Ad divergence ($\alpha = 0.71$)	<ol style="list-style-type: none"> 1. The ad broke away from habit-bound and stereotypical thinking. 2. The ad contained ideas that moved from one subject to another. 3. The ad connected objects that are usually unrelated. 4. The ad finished basic ideas so that they become more intricate. 5. The ad was artistically produced. 	Likert 1–7; “Strongly disagree–Strongly agree”	Smith et al. (2007); Formative measure
Ad relevance ($\alpha = 0.94$)	<ol style="list-style-type: none"> 1. The ad was relevant to me. 2. The ad spoke to my concerns. 3. The advertised product/service fits my needs well. 4. The advertised product/service is important to me. 	Likert 1–7; “Strongly disagree–Strongly agree”	Smith et al. (2007); Formative measure
DPC ($\alpha = 0.78$)	<ol style="list-style-type: none"> 1. I did not want to reach a conclusion about the advertised brand too quickly. 2. I struggled with providing judgments of the advertised brand. 3. I wanted to know more about the advertised brand before the conclusion is confidently drawn. 4. I did not want to apply my previous impression to the advertised brand immediately. 5. I considered both the positive side of the brand and negative side of the brand to reach my decision. 6. Even if I have made up my mind now, I may still want to change this opinion if there is compelling information against it. 7. I still have not made up my mind regarding the brand. 8. I wish I could have more information available to judge the advertised brand. 	Likert 1–7; “Strongly disagree–Strongly agree”	Webster and Kruglanski (1994) Kardes et al. (2004) As pointed out by Kruglanski et al. (1997), DPC is a formative construct.
Positive affect ($\alpha = 0.87$)	<ol style="list-style-type: none"> 1. Interested 2. Inspired 3. Excited 4. Attentive 	5-point scale; “Not very much–Very much”	Watson et al. (1988)
Purchase intentions ($\alpha = 0.83$)	<p>What is the probability that you will:</p> <ol style="list-style-type: none"> 1. Try out the advertised brand? 2. Purchase the advertised brand? 3. Pay a higher price for this brand? 	7-point scale “Improbable–Probable”	MacKenzie et al. (1986) Smith and Swinyard (1988)
Viewing intentions ($\alpha = 0.97$)	<p>What is the probability that you will view the ad again?</p> <ol style="list-style-type: none"> 1. Very unlikely–Very likely 2. Very impossible–Very possible 3. Very improbable–Very probable 	7-point scale	
Production quality ($\alpha = 0.97$)	<ol style="list-style-type: none"> 1. The audio elements of the ad (e.g., music, voice-overs, sound effects, etc.) were of high quality. 2. The visual elements of the ad (e.g., images, colors, lighting, etc.) were of high quality. 3. The production elements of the ad (e.g., expensive staging, celebrities, action scenes, special effects, etc.) were of high quality. 4. Overall, it must have cost a lot of money to produce the ad. 	Likert 1–7; “Strongly disagree–Strongly agree”	Smith et al. (2007)

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