

Advertising Engagement: A Driver of Message Involvement on Message Effects

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Engagement plays a contingent role in the effectiveness of advertising processing that corresponds to the message effects created during the process. Such message effects are advertising recall, message involvement, message believability, attitude toward the message (A_M), and attitude toward the advertisement (A_{AD}). This study's objective is to examine whether higher engagement initiated by contextual relevance increases advertising recall, message involvement, message believability, A_M , and A_{AD} . The results have revealed that higher engagement increases advertising recall, message involvement, message believability, A_M , and A_{AD} . Moreover, message involvement mediates the engagement effect on message believability, whereas A_M mediates message believability on A_{AD} . Implications based on the findings demonstrate the importance of engagement as a driver of message involvement and a metric for advertising effectiveness.

ON MARCH 21, 2006, the Advertising Research Foundation (ARF) announced its new official definition of engagement. Delivered by ARF Chief Research Officer Joe Plummer at the annual conference, the ARF unveiled a working definition of engagement: "engagement is turning on a prospect to a brand idea enhanced by the surrounding context" (Elliott, 2006). Consumers increasingly insist on being able to consume media when and where they want, on any platform or device. Consumers have a newfound control over their media experiences because the technology and media industries are obliging them. Consequently, advertisers are eager to increase the engagement of their advertising because advertisers are increasingly demanding accountability for the money they spend on their advertising.

Terms often associated with engagement are involvement and relevance. A majority of advertisements do not receive any active processing (Webb and Ray, 1979), due in part to advertising clutter and consumer involvement in tasks that occupy attention and limit processing (MacInnis

and Jaworski, 1989). Involvement, the motivation to process information and an important factor of advertising effectiveness (Greenwald and Leavitt, 1984), may occur when a person's perception or attention is directed toward an advertisement (Andrews, 1988). While advertising researchers traditionally examine involvement in processing advertisements, a primary antecedent of involvement in processing an advertisement is the perceived need for relevant information (Burnkrant and Sawyer, 1983). Thus, engagement initiated by contextual relevance may be an important driver of involvement because engagement may be a precondition to the level of involvement that influences the consequences of message effects on attitude formation (Ephron, 2006; Harvey, 1997).

Specifically in the advertising setting, engagement is defined here as a measure of the contextual relevance in which a brand's messages are framed and presented based on its surrounding context. This definition conforms to the ARF's working definition of engagement and supports the concept of contextual targeting, which is

Engagement is turning on a prospect to a brand idea enhanced by the surrounding context.

placing highly relevant advertisements adjacent to editorial contents expected to be visited by target consumers (Harvey, 2006b). For example, American Express' advertising campaign (Figure 1) features a tennis star, Andy Roddick, playing tennis with a fictitious character and opponent, Pong. The advertisement was placed within an online news article about Andy Roddick to invite readers to play tennis with Pong. In this case, the advertisement highly related to the article (surrounding context) aims to engage readers (prospects) to play a tennis game sponsored by American Express (a brand idea). While readers are involved in reading the article about Andy Roddick, the advertisement may trigger consumer attention and activate processing of the advertisement due

to engagement initiated by contextual relevance.

While involvement related to processing advertisements has been an important construct of advertising research, empirical investigations of the engagement effect and its relationship with involvement have been limited. A question that has not been addressed in the literature remains whether advertisements that engage consumers more could elicit greater message effects. Thus, the present study aims at studying engagement by examining:

1. whether higher engagement initiated by contextual relevance increases advertising recall, message involvement, message believability, attitude toward

the message (A_M), and attitude toward the advertisement (A_{AD}); and

2. what relations among engagement, message involvement, message believability, A_M , and A_{AD} are.

This study specifically examines whether an online advertisement that invites consumers to play a game while they are playing an online game (engagement initiated by contextual relevance) generates better advertising recall, message involvement, message believability, A_M , and A_{AD} than an online advertisement that does not invite consumers to play a game. Because message involvement, message believability, A_M , and A_{AD} are often necessary conditions for persuasion and branding (Laczniak, Kempf, and Muehling, 1999), showing whether or not higher engagement enhances message effects and understanding their relations would be an important contribution to the understanding of engagement effects on online advertising effectiveness that significantly affects brand choice.

LITERATURE REVIEWS

Engagement and contextual relevance

As the advertising industry grapples with the profound changes in media such as the internet, the concept of engagement has emerged as a demand creation paradigm than the reach or awareness focused paradigm (Ephron, 2005). Advertisers have identified engagement as a crucial component that underlies consumer brand choice in response to communications. Engagement occurs because of a brand idea or media the consumer experiences (Barocci, 2006). It is a critical measurement of when consumers are strongly engaged in brands, brand messages, and their surrounding environments.

Recent studies have revealed that there are various dimensions or drivers of engagement. They range from an exposure-based standpoint such as attentiveness to

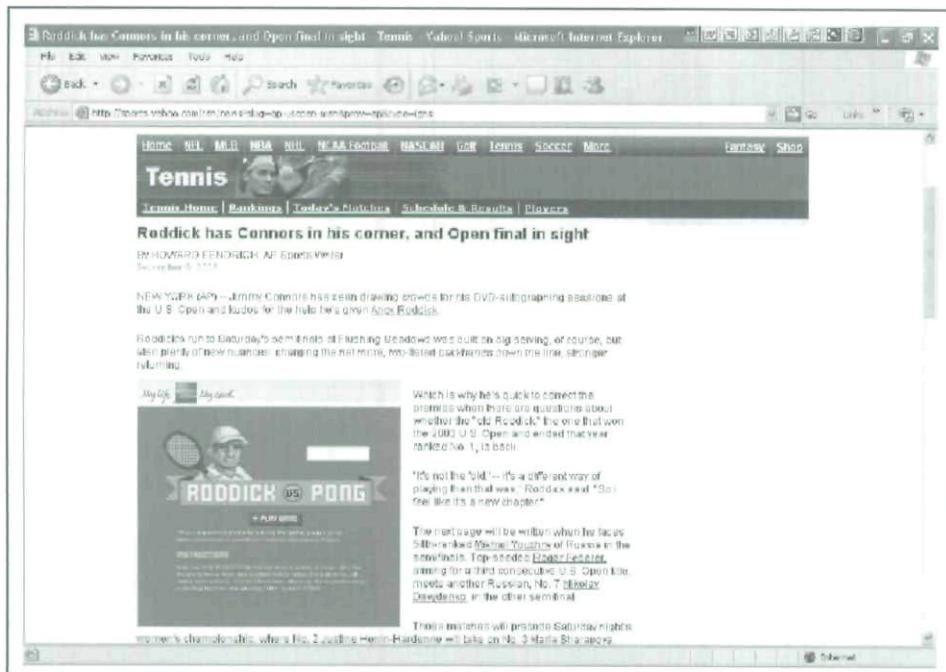


Figure 1 Engagement Based on Contextual Relevancy

qualitative aspects and relevance (Ephron, 2005). Given the complexity of assessing how consumers interact with advertising, these dimensions or drivers of engagement are not necessarily separate from one another. Measuring time spent with a medium is a fundamental component of looking at engagement—a consumer must spend time with a medium in order to experience its advertising. Other possible drivers of engagement are surprise, utility/relevancy, and emotional bonding, identified by Joe Plummer, ARF's Chief Research Officer (Harvey, 2006a).

Wells, Burnett, and Moriarty (1992, p. 387) have suggested, "an unexpected idea can be one with a twist, an unexpected association, or catchy phrasing." Surprises or novelty in advertisements are in some way unexpected and therefore could enhance consumers' engagement in a way that it would not if it were predictable. Advertisements that elicit positive affect could also draw engagement because liking is believed to be broadly descriptive of positive A_{AD} (Seamon, Marsh, and Brody, 1984). Relevance can be defined as the fit between advertising message and the consumer and advertising and the media environment (Ephron, 2005). Overall, relevance speaks to the importance of targeting as a factor of engagement. Advertisements that feature utility and relevancy appeals speak to consumers' interests. This dimension, the focus of this study, could be highly functional in driving engagement among target consumers.

The contextual relevance between an advertisement and its surrounding context that can initiate engagement is grounded in the theory of information relevancy (Baker and Lutz, 2000). The information that can help shape a consumer's choice goal tends to be the most relevant information to the consumer (Feldman and Lynch, 1988). Baker and Lutz (2000) have proposed and tested

their relevance-accessibility model and found that a message appeal is most likely to influence consumer choice goal when it is both relevant and accessible. Their findings have also suggested that when consumers are satisfied with the relevant information they receive for choice-goal deliberation, their choice goal is to buy the first acceptable brand they encounter. When consumers believe that there are no significant differences among the brands, they are likely to seek product features or prices that are most relevant to his or her choice goal. As a result, the degree of information relevancy influences how consumers utilize such information to help formulate their attitudes.

Leigh (1991) reviewed the effects of message congruence among multiple stimulus modalities to demonstrate the importance of congruence to the subject of comparisons between TV and radio broadcast media. His study was concerned with the manner in which stimulus properties of tasks, the processing strategies adopted by an individual, and the processing operations performed on each task may influence overall and individual information processing performance. At the core of this processing is the concept of the schema, being integrally involved in a perceptual cycle (Neisser, 1976). A schema is that portion of the entire perceptual cycle that is internal to the perceiver, modifiable by experience, and specific to what is perceived. This processing is relevant to contextual relevance because information related to a developing or active schema is more likely to be interpreted correctly and coherently. For example, highly congruent audio and video stimuli exhibit comparable positive effects on processing and memory, compared to the cases where the audio and video provide weakly related or even different information (Leigh, 1992).

Research has preliminarily examined how contextual relevance performs in mea-

sures of engagement (Harvey, 2006a). The initial results have shown that the editorial environment of contextual relevance can increase attention to advertisements and advertising awareness. Because a consumer's need for information is shaped by the degree of perceived relevance (Burnkrant and Sawyer, 1983), this study argues that contextual relevance between an advertisement and its surrounding context can initiate higher engagement. An advertisement that creates contextual relevance to its surrounding context may produce a catalyst for increased amount of message involvement and positive attitude formation.

Involvement

Consumers often focus their involvement on a primary task (e.g., reading news articles), thus reducing cognitive resources available to involve in secondary information (e.g., advertisements) surrounding the primary task. Because cognitive resources available for attending to secondary information are limited, secondary information cannot be explicitly recognized (Leigh, 1991; MacInnis and Jaworski, 1989). In other words, memory traces for this information are unlikely to be strong enough to be retrievable during search of memory, which can cause poor advertising recall and brand recognition.

Greenwald and Leavitt (1984) used psychological theories of attention and levels of processing to establish a framework of audience involvement in advertising. They outlined four hierarchical levels: preattention, focal attention, comprehension, and elaboration. As a higher level of involvement is reached, increased capacity is allocated to a message source. Lower levels use relatively little capacity and extract information needed to determine whether a higher level will be invoked. The higher levels require greater involvement and result in increasingly durable cognitive and

attitudinal effects. These levels then serve as the basis for the information consumers store in memory (Andrews and Shimp, 1990). The final step, elaboration, occurs when consumers restate messages and summarize their reactions to them.

Research has suggested that involvement is best dealt with when it is conceptualized within a particular domain (Andrews and Durvasula, 1991; Andrews, Durvasula, and Ahkter, 1990). One domain that is highly related to engagement is message involvement. Message involvement is defined here as "a motivational construct that influences consumers' motivation to process information at the time of message exposure" (Baker and Lutz, 2000, p. 2). Message involvement concerns the message, not the general product class that is deemed relevant and is elaborated upon (Batra and Ray, 1985). Moreover, message involvement exists as an individual state evoked by a particular message at a particular point of time (Laczniak, Muehling, and Grossbart, 1989). Celsi and Olson (1988) have tested several hypotheses regarding the effects of message involvement on the amount of comprehension. Their results have revealed that higher message involvement increases the amount of the attention and cognitive effort during comprehension of advertisements.

Dominant among the operationalizations of message involvement are those that consider message involvement to be primarily an attentional (focal attention, direction/intensity) construct and a personal/situational (message/personal relevance) construct (Laczniak and Muehling, 1993). When viewed from an attentional perspective, message involvement is often concerned with the focus on a particular aspect of the advertisement (Laczniak and Muehling, 1993). When viewed from a relevance perspective, message involvement is often concerned with the

personal relevance of the advertising stimulus itself or the attempt to create a situation in which consumers are encouraged to process the stimulus personally relevant to them (Andrews and Durvasula, 1991; Laczniak and Muehling, 1993).

By integrating these two perspectives, message involvement represents an individual variable that could indicate the amount of arousal or interest that is evoked by advertising messages (Laczniak, Kempf, and Muehling, 1999). Thus, perceived relevance of the messages, enhanced by higher engagement based on contextual relevance, directs consumers' direction of attention and the intensity of advertising processing. Then it influences the consequences of message effects by the association of levels of involvement with an orderly series of attitudinal effects (Greenwald and Leavitt, 1984). Consumers who are more involved in processing advertising messages may undergo a semantic analysis in which the memorial representation of the information is accessed from memory, which in turn affects subsequent attitudes. This seems to suggest the relationship between engagement and message involvement: engagement can be a driver of message involvement.

Relationship between involvement and engagement

Among the four levels of involvement, two stages, the characteristics of preattention and focal attention, are particularly important to demonstrate the relationship between engagement and message involvement. Consumers in the preattention level allocate little capacity to processing incoming messages. In this level of audience involvement, sensory buffering and feature analysis are the processing criteria that consumers may employ. Salient cues in the unattended information may be detected and cause a shift of attention to the source of the message that contains

the salient cues (Greenwald and Leavitt, 1984).

Engagement initiated by contextual relevance, a salient cue, can cause a shift of attention to the source of the message and increase message involvement, motivation to process information. When consumers are motivated to process secondary information, secondary information becomes increasingly the focus of consumer attention. Consumers at the focal attention stage use "modest capacity to focus on one message source, and to decipher the message's sensory content into categorical codes" (Greenwald and Leavitt, 1984, p. 584). In other words, consumers use perceptual and semantic processing to produce word and object category representations. Consequently, engagement initiated by contextual relevance may also increase message believability (Wang, 2006).

Using American Express advertisement (Figure 1) as an example, placing an advertisement that features a tennis star, Andy Roddick, and inviting consumers to play a tennis game within an online news article about Andy Roddick, creates the engagement effect based on contextual relevance. Once consumers consider this contextual relevance as a salient cue, consumers may shift their attention to the advertisement, which then increases consumers' message involvement with the advertisement. In this case, the engagement effect becomes the driver of message involvement.

RESEARCH HYPOTHESES AND QUESTION

Because the engagement effect increases message involvement, it is likely that the engagement effect will increase the likelihood of stronger advertising recall. Studies have shown that information relevancy facilitates naming and categorizing semantically related information (Fuentes,

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Carmona, Agis, and Catena, 1994). The heightened attention and possible elaboration due to the engagement effect are presumed to create cognitive pathways back to the originating message, which then increases the probability of advertising recall. Similarly, positive effects are expected to foster improvement of evaluations of the advertisement (Leigh, 1994).

Research has also showed that the pre-attentive analysis of information can enhance liking for it (Janiszewski, 1988) because the subconscious analyses can influence preference for a stimulus (Anand, Holbrook, and Stephens, 1988). As the engagement effect increases message involvement, an individual's liking of the message is enhanced because either subconscious or conscious analyses often create a feeling of familiarity that is interpreted as affect or preference for the message (Bonanno and Stillings, 1986; MacInnis, Moorman, and Jaworski, 1991). Thus, this study tests the following hypotheses.

- H1a: Higher engagement initiated by contextual relevance will generate stronger advertising recall than lower engagement.
- H1b: Higher engagement initiated by contextual relevance will generate higher message involvement than lower engagement.

- H1c: Higher engagement initiated by contextual relevance will generate stronger message believability than lower engagement.
- H1d: Higher engagement initiated by contextual relevance will generate stronger A_M than lower engagement.
- H1e: Higher engagement initiated by contextual relevance will generate stronger A_{AD} than lower engagement.

Based on the literature review, engagement and message involvement are highly interrelated constructs. However, no direct conclusion has been drawn regarding their relationship and effects on message believability, A_M , and A_{AD} . Thus, this study asks the following research question.

- RQ: What are the relations among engagement, message involvement, message believability, A_M , and A_{AD} ?

METHODOLOGY

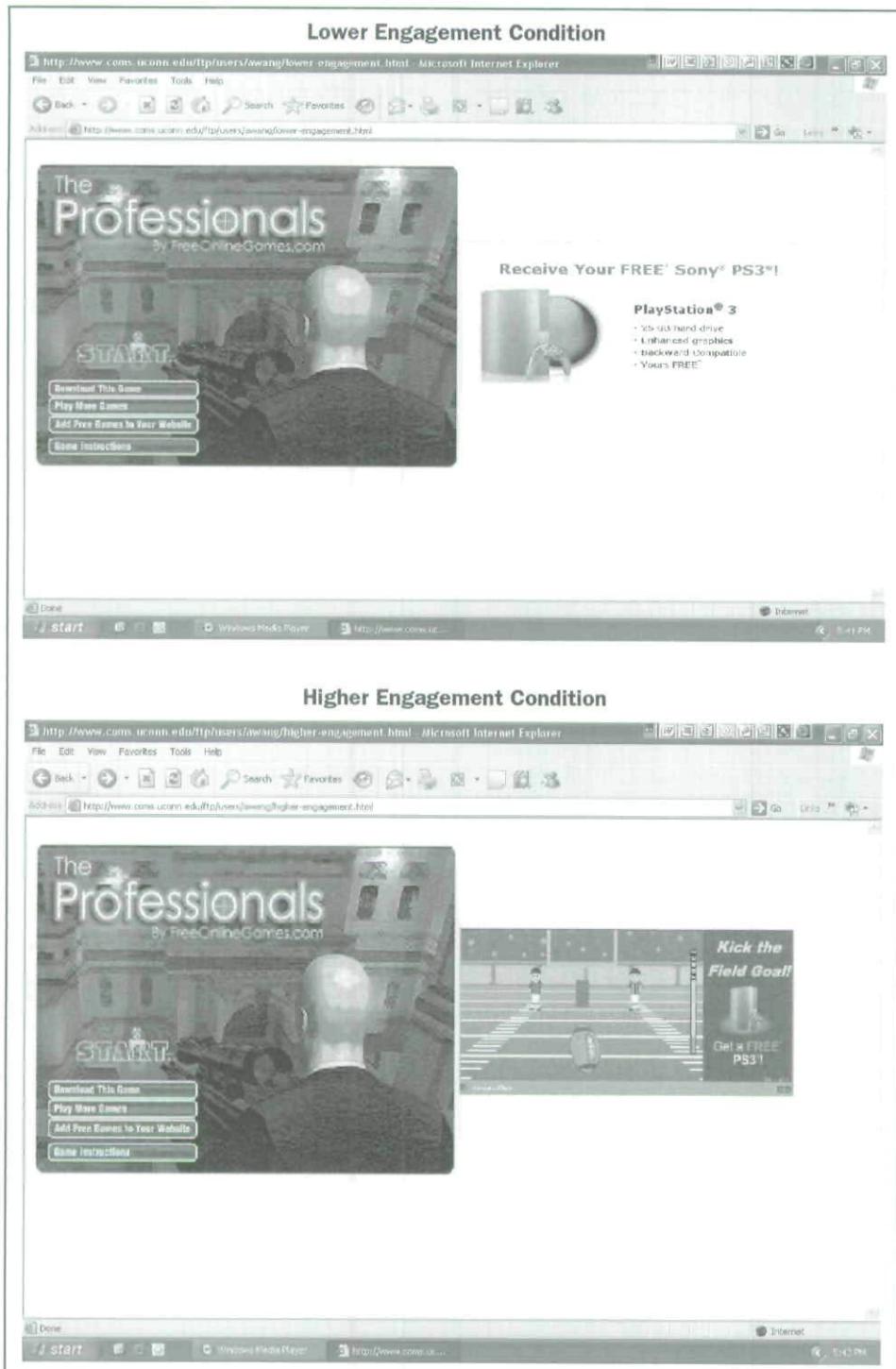
Design

One-way experimental design manipulating two levels of engagement (lower versus higher engagement) was employed. The design of lower versus higher engagement condition was based on the study's definition of engagement, the contextual

relevance in which a brand's messages are framed and presented in an advertisement related to its surrounding context. Because engagement is to turn on a prospect to a brand idea in an advertisement related to its surrounding context, contextual relevance between a primary task and an online advertisement was manipulated to form the lower and higher engagement condition (Figure 2).

The participants were involved in a primary task of playing an online game featured in a website. Next to the online game was an online advertisement. The same online game was featured in both higher and lower engagement conditions. However, in the lower engagement condition, the participants were exposed to an online advertisement that did not invite them to play a game. The advertisement said "Receive Your Free Sony PS3." The participants in the higher engagement condition were exposed to an online advertisement that invited them to play a game. The advertisement invited the participants to kick the field goal to receive a free PS3.

The argument—playing an online game next to an online advertisement that invited the participants to play a game could attract their attention—was based on higher engagement initiated by the contextual relevance between the advertisement and the online game. Once encountered, the game featured in the advertisement that was associated with the surrounding context (the online game) could initiate the engagement effect. However, it is not possible to evaluate this argument with an experimental design that explicitly directs participants to process advertisements (McQuarrie and Mick, 2003). Instead, this study used an experiment representing a realistic exposure condition in which the participants were told to engage in playing the online game to which processing resources were applied. In other words, there was no

**Figure 2** Experimental Conditions

coaching or mentioning of looking at the tested advertisement in either condition.

The participants were asked to complete this study in a computer laboratory

and were assigned randomly to one of the two experimental conditions. All participants first received an instruction booklet including a set of questionnaires. The

first page of the booklet informed the participants that the principal investigator is interested in their opinions about an online game. The second page of the booklet informed the participants of the web address that manipulated either lower or higher engagement condition. In either condition, the participants were given 10 minutes to play the online game. After 10 minutes, the participants were asked to complete a set of questionnaires.

Participants

The participants ($N = 239$) used in this study were undergraduate students at a northeastern university. The participants were instructed not to discuss this study with any other students or anyone else once they were recruited to participate in the study. There were 119 participants in the lower engagement condition and 120 participants in the higher engagement condition. There were 112 male participants (46.9 percent) and 127 female participants (53.1 percent) with an averaged age of 20 years old.

Contrary to popular belief that PC games are for kids, 90 percent of all purchasers are over 18 years old (Games-advertising, 2006). Moreover, women are purchasing just as much video/PC entertainment software as men. Because undergraduate students are one of the primary target audiences, this study's samples represented the populations this study purported to represent.

Stimuli

This study designed two websites that manipulated the two experimental conditions (Figure 2). In the lower engagement condition, the website featured an online game and an online advertisement that initiated lower engagement effect. In the higher engagement condition, the website featured the same online game and an online advertisement that initiated higher

engagement effect based on contextual relevance.

This study used two manipulation checks to ensure the validity of the study's engagement manipulations. The measure reflecting perceived engagement asked the participants to rate the level of perceived engagement when exposed to the advertisement, where 1 = "not engaged at all" and 7 = "extremely engaged" (Laczniak, Kempf, and Muehling, 1999). The participants in the lower engagement condition ($M = 2.15$, $SD = 1.35$) perceived lower engagement than the participants in the higher engagement condition ($M = 3.23$, $SD = 1.86$), $F(1, 155) = 16.4$, $p < .001$, $\eta^2 = 0.1$. The participants were also asked how relevant the context of playing an online game was to the advertisement, where 1 = "not at all" and 7 = "a lot." The participants in the lower engagement condition ($M = 2.58$, $SD = 1.45$) perceived lower contextual relevance between the online game and the advertisement than the participants in the higher engagement condition ($M = 3.13$, $SD = 1.69$), $F(1, 155) = 4.61$, $p < .033$, $\eta^2 = 0.03$. Thus, the engagement manipulations were successful.

Measures

A question asked the participants whether they noticed the advertisement while playing the online game, where 1 = "yes" and 0 = "no." This measure ensured that the study only analyzed the data collected from the participants who noticed the advertisement. It was unlikely that the participants could answer questions regarding the advertisement when they did not even notice the advertisement.

Advertising recall was measured by asking the participants to list the advertisement's contents (Cacioppo and Petty, 1981). In other words, the participants needed to remember the advertisement to produce a correct advertising recall. Participants' answers were recorded by two categories.

An advertising recall was labeled as a correct advertising recall, whereas an incorrect advertising recall, no answer, do not know, or do not remember were not labeled as an advertising recall.

Message involvement was measured by asking the participants "how much attention you paid to process the advertisement," "how engaging it was for you to process the advertisement," "what was the overall attention you had with the advertisement," and "how involving it was for you to process the advertisement" (Laczniak, Kempf, and Muehling, 1999). These four items were measured on a 7-point scale where 1 = "not at all" and 7 = "extremely." The Cronbach's α value for message involvement ($M = 2.75$, $SD = 1.57$) was 0.94.

Message believability was measured by asking the participants to complete the sentence, "to what extent, do you believe the messages in the advertisement are . . .," using a 5-item scale composed of not informative/informative, untrustworthy/trustworthy, inaccurate/accurate, unconvincing/convincing, and not believable/believable (Hallahan, 1999; Wang, 2006). The Cronbach's α value for message believability ($M = 3.79$, $SD = 1.5$) was 0.95.

A_M was measured by asking the participants to complete the sentence, "the messages in the advertisement are . . .," using a 5-item scale composed of boring/interesting, not attention-getting/attention-getting, bad/good, not fun/fun, and do

not like it/like it (Hallahan, 1999). The Cronbach's α value for A_M ($M = 3.12$, $SD = 1.48$) was 0.93. A_{AD} was measured by asking the participants to complete the sentence, "I would describe the advertisement as . . .," using a 6-item scale composed of bad/good, unpleasant/pleasant, low quality/high quality, do not like it/like it, not desirable/desirable, and unfavorable/favorable (Hallahan, 1999). The Cronbach's α value for A_{AD} ($M = 3.29$, $SD = 1.57$) was 0.97.

The results indicated that all measures were reliable. Consequently, the values of the constructs were computed as the mean of the ratings of the items associated with each construct (Table 1). This study measured and used two covariates for data analysis. Participants' gender was asked and coded. Among 157 participants who noticed the advertisement, there were 70 male participants (44.6 percent) and 87 female participants (55.4 percent), indicating a fair distribution of gender used in the data analysis. Participants' age was also recorded ($M = 19.85$, $SD = 3.22$).

RESULTS

Engagement effects

A chi-square test was performed to examine whether the participants noticed the advertisement in the lower versus higher engagement condition (Table 2). A second chi-square test was performed to test the relationship between engagement and

TABLE 1
Descriptive Statistics for Measures

Measures	M	SD	Reliability
Message involvement	2.75	1.57	0.94
Message believability	3.79	1.5	0.95
Attitude toward the messages (A_M)	3.12	1.48	0.93
Attitude toward the advertisement (A_{AD})	3.29	1.57	0.97

TABLE 2
Engagement and Advertising Awareness

	Whether noticing the advertisement or not?	
Engagement	Yes	No
Higher	90 (75%)	30 (25%)
Lower	67 (56%)	52 (44%)

advertising recall among 157 participants who noticed the advertisement (Table 3). The MANCOVA procedure was used with message involvement, message believability, A_M , and A_{AD} as the dependent variables, engagement as the independent variable, and age and gender as the covariates.

The results based on the first chi-square test revealed that 157 (66 percent) out of 239 participants noticed the advertisement. The participants in the higher engagement condition (75 percent) were more likely to notice the advertisement than the participants in the lower engagement condition (56 percent), $\chi^2(1) = 9.27$, $p < .002$. The results based on the second chi-square test revealed that the participants in the higher engagement condition (60

percent) generated higher advertising recall than the participants in the lower engagement condition (43 percent), $\chi^2(1) = 4.31$, $p < .038$. Thus, Hypothesis H1a was supported.

The multivariate tests based on the MANCOVA procedure revealed that there was a main effect for the engagement effect, Wilks' $\lambda = 0.908$, $F(4, 150) = 3.817$, $p < .006$, $\eta^2 = 0.092$; the mean vectors were not equal and the set of means between conditions (lower versus higher engagement) was different. Gender and age were not found to contribute to the model significantly as covariates. The tests of between-participants effects based on the individual univariate tests and means (standard deviations) of key dependent variables were reported in Tables 4 and 5, respectively. The dependent variables' mean comparisons between lower and higher engagement were depicted in Figure 3.

The participants in the higher engagement condition ($M = 3.11$, $SD = 1.69$) exhibited higher message involvement than the participants in the lower engagement condition ($M = 2.26$, $SD = 1.25$), $F(1, 153) = 12.935$, $p < .000$, $\eta^2 < 0.078$. The participants in the higher engagement condition ($M = 4.05$, $SD = 1.41$) exhibited stronger message believability than the participants in the lower engagement condition ($M = 3.44$, $SD = 1.54$), $F(1, 153) = 6.91$, $p = .009$, $\eta^2 = 0.043$. The participants in the higher engagement condition ($M = 3.31$, $SD = 1.56$) exhibited stronger A_M than the participants in the lower engagement condition ($M = 2.85$, $SD = 1.34$), $F(1, 153) = 4.073$, $p < .045$, $\eta^2 = 0.026$. The participants in the higher engagement condition ($M = 3.56$, $SD = 1.61$) exhibited stronger A_{AD} than the participants in the lower engagement condition ($M = 2.92$, $SD = 1.46$), $F(1, 153) = 6.857$, $p = .01$, $\eta^2 = 0.043$.

TABLE 3
Engagement and Advertising Recall

	Whether recalling the advertisement or not?	
Engagement	Yes	No
Higher	54 (60%)	36 (40%)
Lower	29 (43%)	38 (57%)

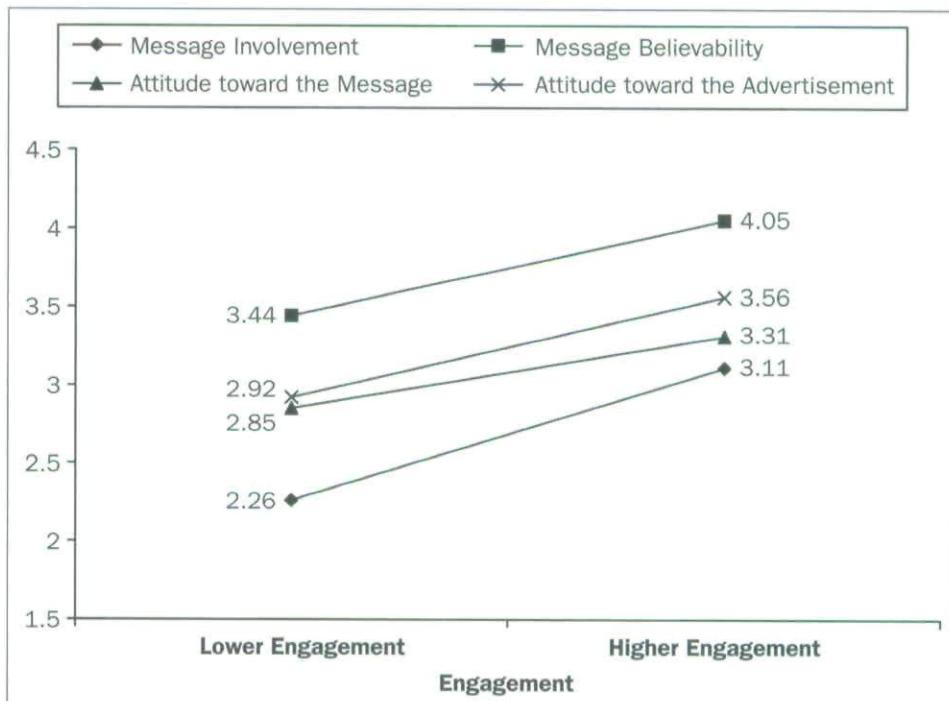


Figure 3 Mean Comparisons between Lower and Higher Engagement

TABLE 4

Tests of Between-Participants Effects

Source	Dependent Variable	df	F	Significant	η^2
Corrected model	Message involvement	3	6.616	0.000	0.115
	Message believability	3	4.244	0.007	0.077
	A_M	3	2.359	0.074	0.044
	A_{AD}	3	3.238	0.024	0.06
Intercept	Message involvement	1	37.093	0.000	0.195
	Message believability	1	39.093	0.000	0.204
	A_M	1	31.245	0.000	0.17
	A_{AD}	1	32.608	0.000	0.176
Age	Message involvement	1	5.322	0.022	0.034
	Message believability	1	0.092	0.762	0.001
	A_M	1	1.271	0.261	0.008
	A_{AD}	1	2.179	0.142	0.014
Gender	Message involvement	1	1.344	0.248	0.009
	Message believability	1	5.504	0.02	0.035
	A_M	1	1.472	0.227	0.01
	A_{AD}	1	0.599	0.440	0.004
Engagement	Message involvement	1	12.935	0.000	0.078
	Message believability	1	6.91	0.009	0.043
	A_M	1	4.073	0.045	0.026
	A_{AD}	1	6.857	0.01	0.043
Error	Message involvement	153			
	Message believability	153			
	A_M	153			
	A_{AD}	153			
Total	Message involvement	157			
	Message believability	157			
	A_M	157			
	A_{AD}	157			
Corrected total	Message involvement	156			
	Message believability	156			
	A_M	156			
	A_{AD}	156			

Mediation effects

To answer the research question asked, this study examined the relations (Figure 4) among the engagement effect, message involvement, message believability, A_M , and A_{AD} . A series of regression analyses were used to test for mediating effects among the independent and dependent variables (Judd and Kenny, 1981). Message involvement was regressed on the engagement effect ($\beta = -0.267$, $p < .001$), $F(1, 155) = 11.854$, $p < .001$, $R^2 = 0.071$. The results revealed that lower engagement reduced message involvement. Message believability was regressed on the engagement effect ($\beta = -0.203$, $p < .011$), $F(1, 155) = 6.649$, $p < .011$, $R^2 = 0.041$. The results revealed that lower engagement reduced message believability. Message believability was regressed on the engagement effect ($\beta = -0.078$, $p = .283$) and message involvement ($\beta = 0.467$, $p < .000$), $F(2, 154) = 24.818$, $p < .000$, $R^2 = 0.244$. The results based on the simultaneous regression analysis revealed that the engagement effect was no longer evident on message believability and higher message involvement enhanced message believability.

As Baron and Kenny (1986) have suggested, the results of three regression equations provided the tests of the linkages of the mediating effect. The results revealed that there was a perfect mediation between message involvement and the engagement effect on message believability because three conditions of mediation held. First, the engagement effect affected message involvement in the first equation. Second, the engagement effect also affected message believability in the second equation. Finally, message involvement affected message believability, and the engagement effect did not affect message believability in the third equation.

A_{AD} was regressed on message believability ($\beta = 0.734$, $p < .000$), $F(1, 155) =$

TABLE 5

Means (Standard Deviations) of Key Dependent Measures

N	Lower Engagement		Higher Engagement		Significant Effects	F		
	67		90					
	M	SD	M	SD				
Message involvement	2.26	1.25	3.11	1.69	Engagement	12.94***		
Message believability	3.44	1.54	4.05	1.41	Engagement	6.91**		
A_M	2.85	1.34	3.31	1.56	Engagement	4.07*		
A_{AD}	2.92	1.46	3.56	1.61	Engagement	6.86**		

Note: * $p < .05$; ** $p < .01$; *** $p < .001$.

180.524, $p < .000$, $R^2 = 0.538$. The results revealed that message believability positively enhanced A_{AD} . A_M was regressed on message believability ($\beta = 0.73$, $p < .000$), $F(1, 155) = 176.436$, $p < .000$, $R^2 = 0.532$. The results revealed that message believability also positively enhanced A_M . A_{AD} was regressed on A_M ($\beta = 0.747$, $p < .000$) and message believability ($\beta = 0.188$, $p < .000$), $F(2, 154) = 306.442$, $p < .000$, $R^2 = 0.799$. An acceptable mediation held because the standardized coefficient of message believability on A_{AD} was less in the multiple regression equation than in

the single regression equation (Baron and Kenny, 1986).

As depicted in Figure 4, two important mediators emerged from the examined relations among the engagement effect, message involvement, message believability, A_M , and A_{AD} . While message involvement mediated the engagement effect on message believability, A_M mediated the effect of message believability on A_{AD} . In other words, the engagement effect was a driver of message involvement on message believability, a driver of A_M on A_{AD} .

DISCUSSION

The evolving field of interactive and digital media such as the internet is presenting new opportunities to generate higher engagement with online advertisements. While limited studies have empirically examined the engagement effect, this study not only contributes to the literature by examining the definition of engagement in an interactive medium but also contributes to the advertising processing research by investigating the engagement effect on advertising recall, message involvement, message believability, A_M , and A_{AD} . First, the results have suggested that engagement initiated by contextual relevance can be influential (Harvey, 2006a). The most important finding in this study, however, is that message involvement mediates the engagement effect on message believability mediating the effect of A_M on A_{AD} . Even though higher engagement can enhance advertising recall, message involvement, message believability, A_M , and A_{AD} , the engagement effect influences message believability by the mediation of message involvement. Then message believability influences A_{AD} by the mediation of A_M . This result is extremely important because it supports the study's argument that the engagement effect is an influential driver of message involvement. It also identifies a model sequence regarding where and how the relations among the engagement effect, message involvement, message believability, A_M , and A_{AD} operate. Moreover, it clarifies the highly correlated relationship between engagement and message involvement.

Practical implications

Advertisers should be encouraged by the results presented here because the results confirm the importance of engagement in many aspects of advertising processing. The immediate implication of this study

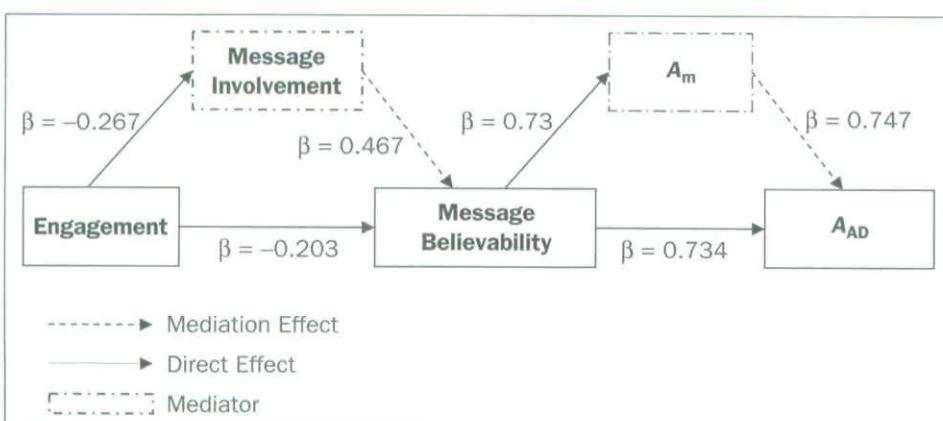


Figure 4 The Relations among Message Involvement, Message Believability, A_M , and A_{AD}

is that using contextual relevance to initiate the engagement effect not only can help advertisers have their online advertisements actually noticed by consumers but also can create higher consumer message involvement. Advertisers can generate the engagement effect by using internet technologies to reach consumers with highly relevant advertisements based on what they read or do (e.g., a primary task) while placing advertisements adjacent to editorial contents expected to be visited by target consumers. Moreover, the same strategy can be used to reach consumers based on where they navigate.

In the same line of reasoning, manipulating engagement based on contextual relevance should also be implemented in traditional media. In newspaper or magazine context, engagement based on contextual relevance can be utilized by reaching consumers with highly relevant advertisements based on what they read while placing advertisements adjacent to editorial contents. In fact, the contextual relevance between an advertisement and a primary task has been employed in formulating advertorial contents. It is common to see an advertisement that is placed next to a magazine article and looks like a magazine article. This approach is used as a contextual targeting approach by advertising practitioners (Harvey, 2006a). For example, airline in-flight magazines often feature reports about travel destinations to which the airline flies and place their advertisements next to the reports.

The results have also suggested a solution to advertising clutter. Because of too many advertisements for the same product category fighting for consumers' attention, consumers may tend to avoid looking at any of them. Thus, engagement based on behavioral engagement and engagement initiated by contextual relevance may help advertisements escape the advertising clutter. For example, Amer-

Advertisers can generate the engagement effect by using internet technologies to reach consumers with highly relevant advertisements based on what they read or do (e.g., a primary task) while placing advertisements adjacent to editorial contents expected to be visited by target consumers.

ican Express used several TV spots during the U.S. Open broadcast to promote the tennis game, "Roddick vs. Pong," and invite tennis fans to go to the website and play the game. Once tennis fans are motivated to go to the site and play the game, they are surrounded by advertising stimulus or product information about American Express. This example demonstrates the use of behavioral engagement and advertising engagement based on contextual relevance to achieve advertising and branding effectiveness.

By integrating the study's results and Harvey's (1997) expanded ARF model, engagement should be directly related to advertising exposure, vehicle exposure, advertising interaction, advertising communication, advertising attentiveness, retention, and advertising persuasion. Advertising attentiveness such as message involvement mediates the engagement effect on advertising retention and persuasion such as message believability. After higher engagement is generated by advertising exposure, vehicle exposure, advertising interaction, and advertising communication, message believability influences A_{AD} by the mediation of A_M .

As Ephron (2006) and Harvey (2006b) have suggested, engagement does not just depend on the media engagement, it depends even more on the creativity and

messages. Thus, advertisers should strategize to enhance advertising engagement by integrating various dimensions or drivers of engagement. Consistent with past research on message effects, message novelty, utility, and affect are factors that may enhance advertising engagement in addition to engagement initiated by contextual relevance (Harvey, 2006a; Seamon, Brody, and Kauff, 1983a, 1983b). Consequently, enhancing advertising engagement by integrating various drivers of engagement can create complementary effects of these drivers and achieve the greatest advertising and branding effectiveness.

Engagement going forward

While this study has mainly examined contextual relevance as the driver of engagement, the effects of engagement initiated by other drivers such as affect have not been fully examined and addressed. Future research should examine the effectiveness of this driver of engagement on message effects. Future research can also examine whether the same relations among the engagement effect initiated by affect, message involvement, message believability, A_M , and A_{AD} will materialize.

Although this study takes an important step to examine the effects of engagement, additional research is needed to determine the underlying process and

generalizability of the findings. The participants might try to stay focused on playing the online game, resisting the advertising messages even though the messages were relevant. Future study should examine whether consumers may react to the surprise of unexpected event by looking at an advertisement when finding the advertisement in a completely unrelated site. Future research should also examine the robustness of engagement effects in cross-media contexts. For example, advertisers have used TV spots to invite audiences to go to their websites for voting or other activities. The comparisons of cross-media use in terms of engagement effects warrant future investigations.

As interest in engagement continues to grow, new research and in-market experience will increase the understanding of engagement's role in improving advertising results. Findings in engagement research can be used to change the way that advertisers think about the relations among consumers, advertising messages, and advertising environments. Future studies should identify and examine a variety of exposure and relationship factors that affect engagement. In the same line of reasoning, future studies should examine a variety of factors that affect targeting based on contextual relevance by examining the fit among consumers, advertising messages, and brands. Drivers of engagement may vary by demographic, product category, medium, and genres within media, which should be studied further in the future. Finally, future studies should explore how creativity placed in various advertising environments differs, perhaps resulting in the development of different creative messages for each medium.

CONCLUSION

By understanding how engagement initiated by contextual relevance affects message effects, the groundwork for the

As interest in engagement continues to grow, new research and in-market experience will increase the understanding of engagement's role in improving advertising results. Findings in engagement research can be used to change the way that advertisers think about the relations among consumers, advertising messages, and advertising environments.

evolution to a new strategy or measurement that reflects the complexity of today's media choices and consumer-empowered media consumption can be laid. The most obvious factor that underpins this reform is the challenge of advertising clutter. In reality, consumers do not usually look for advertisements to process. Thus, this study used a realistic online environment to test engagement effects initiated by contextual relevance. The results certainly confirm the new definition of engagement offered by the ARF and demonstrate the importance of engagement as a driver of message involvement and a metric for advertising effectiveness.

The results have suggested that engagement should not be regarded as a direct indicator of advertising results. Rather, advertising engagement is the goal. This is to say advertising engagement is explained by the message and surrounding context. Engagement initiated by contextual relevance works as the door attendants of message involvement. They direct consumers to see and respond to the advertisement. In this case, the key to achieve advertising engagement is to understand how to materialize the drivers of engage-

ment. As advertisers' knowledge about engaging consumers continues to grow, advertisers' ability to reach consumers with targeted, engaging messages will lead to better communication, and ultimately, better advertising results. **JAR**

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