# Optimizing the Amount of Entertainment in Advertising What's So Funny about Tracking Reactions to Humor?

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Advertising Research Foundation horst@thearf.org Humor and other entertaining content, as opposed to demonstrations of product features and "selling," are increasingly used in advertising, such as TV commercials, to attract and keep consumers' attention. This study uses facial tracking to explore how marketers can best use entertainment in ads to increase their effectiveness in increasing intent to purchase. The findings suggest that the optimal amount of entertainment differs by type of entertainment and target group, but not by product category, and confirms that the funniest ads are not necessarily the most effective.

### INTRODUCTION

In the age of multi-media and multi-tasking, of advertising clutter and DVRs, finding ways to get consumers to pay attention has become a primary focus of advertisers. Providing entertainment in ads is regarded as an effective approach to capture the consumers' initial attention and interest in viewing the entire ad (Woltman Elpers, Wedel, and Pieters, 2003). It was not always like this. Comparing commercials from the early days of television with today's TV advertising, it is evident that most television ads in the fifties or sixties demonstrated product features and concentrated on "selling."

Today, some ads are arguably funnier than the programs they are embedded in, and millions of viewers choose to watch commercials online on social networking sites such as Facebook or You-Tube for their entertainment value. As television is used primarily as an entertainment medium, it is not surprising that commercials perceived as entertaining and creative work well in that medium. Indeed, such ads have been shown to be effective. For example, entertaining content has been shown to increase brand purchase intentions by reducing the consumer's resistance to persuasion (Yang and Smith, 2009). Therefore, the goals of increasing an ad's attractiveness and persuasiveness are usually compatible.

This does not mean, however, that the most entertaining or funniest advertisement is necessarily the most effective. In fact, an informal survey

of Advertising Research Foundation (ARF) members found a lot of skepticism regarding the widely publicized Super Bowl ad rankings, which usually give the highest ratings to particularly funny or otherwise entertaining commercials. Are those really the most effective ads? Advertisers typically do not reveal such information, but the marketers we talked to were doubtful and pointed to corroborating research. (Note: Large-scale studies by Nielsen's IAG division suggest a low correlation between market performance and Super Bowl popularity rankings. Furthermore, a report by the company Communicus headed "Only 1 in 5 Super Bowl Ads Actually Sells Product" seems to overstate the case [Nielsen IAG is a subscription service]; this information is based on personal contacts. Communicus study: see communicus.com/ topic13.php; March 26, 2013.)

In summary, most advertisers believe, and research confirms, that entertainment in ads is a powerful tool to get consumers' attention, and entertaining content can contribute to effectiveness. They also think, however, that entertainment does not necessarily make an ad effective, and too much entertainment could make it less impactful. The question, then, is what is the right amount of entertainment in commercials? Our review indicates that there is no systematic research that has tried to assess the optimal amount of entertainment, such as humor, in advertising.

# In the age of multi-media and multi-tasking, of advertising clutter and DVRs, finding ways to get consumers to pay attention has become a primary focus of advertisers.

The study summarized here is designed to help advertisers determine the appropriate amount of entertainment in television commercials. Using data collected by Affectiva Inc. the authors report on a large-scale field experiment that measures the relationship between entertainment in ads in three product categories (beverages, alcohol, and confectionery) and viewers' purchase intent controlling for other factors.

## **RESEARCH AND THEORY**

Prior research broadly distinguishes between two types of advertising content: entertainment and information (Woltman Elpers et al., 2003). These authors define the amount of entertainment in ads as the extent to which it contains "entertaining, warm, and playful material that makes the commercial pleasant to watch." Other authors have defined entertainment in ads as content that is lively, amusing, imaginative or clever (Aaker and Bruzzone, 1981). Most prior measurements of entertainment determine the amount of entertainment present either via self-report using sliding scales or using independent judges (Woltman Elpers, Mukherjee, and Hoyer, 2004; Woltman Elpers et al., 2003). We take a different approach to measuring entertainment, explained in the next section.

According to Tellis (2004, p. 29), at the initial stages, "lack of interest and active avoidance of advertising are the major reasons why advertising tend not to be effective." Therefore, entertainment first captures the viewer's interest. Prior research indeed has found a direct association between the amount of entertainment and consumers' viewing time of TV commercials (Woltman Elpers et al., 2003).

Prior research has also shown that humor acts by putting the audience in a good mood, reducing their resistance to being persuaded and, through a process of conditioning, transfers positive associations between the ad and the brand (Eisend, 2011; Janiszewski and Warlop, 1993; Tellis, 2004). Research on creative/ clever and other similar ad cues has also shown a link between the positive effect evoked by this class of entertaining content and more favorable brand evaluations and purchase intentions (Keller, 1987; Yang and Smith, 2009). Regarding the level of entertainment in ads, Berlyne (1972) argues that a medium level of humorous entertainment generates most pleasure by striking the optimal amount of arousal.

There is research pointing to potential negative consequences of using humorous and other entertainment in ads. In instances where the humor is not perceived in a positive manner by viewers, it can generate negative reactions. This is the case when humor is perceived as boring, stale, or offensive and reduces credibility (see Belch and Belch, 2007, p. 186; or Eisend, 2011). The authors of the current study focus on entertainment that is positively experienced (e.g., generates a smile). In this way, the authors are able to address the key issue on which there is little research evidence: the optimal amount of entertaining content that is actually perceived as entertaining by the consumer.

Another downside of entertaining ad content addressed in prior research is when positive entertainment distracts the viewer from the brand and its attributes, thereby harming comprehension. Mitchel and Olsen (1981) suggest that an individual can pay close attention to an advertisement for its entertainment value, but this may detract from actively processing brand-relevant associations and information.

A different reason for potentially negative consequences of entertainment and humor in ads is expressed by Sternthal and Craig (1973), who argue that the "proper development of [entertaining] humor" requires much of the available ad time that might better be used in developing product or service attributes. Entertainment, they argue, can simply overcrowd the product message. Finally, Eisend (2011) questions results from prior studies using entertaining ads because they were "mostly performed in controlled laboratory settings, are only mildly amusing, and the effects may therefore differ from the effects of real world advertisements."

The authors' review of research and theory on this issue, then, finds discussions of the pros and cons of using entertainment in advertisements but little research evidence on the issues addressed by our research.

# RESEARCH DESIGN AND DATA COLLECTION

This study uses new facial analysis technology in a real-world online setting to assess consumers' reactions to television commercials and then relates the individual facial responses to a measure of purchase intent in three product categories: beverages, alcohol, and confectionery.

The authors studied 275 consumers exposed to a series of ads from a random sample of 82 ads from 35 brands in the three product categories. They measured

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- viewer's facially expressed entertainment levels by continuously capturing smile intensity,
- viewer's intent to purchase the brand,
- brand familiarity and product usage data, and
- demographic and other individuallevel information.

Perceived levels of entertainment were assessed using a Web-based automatic facial expression analysis system that captures facial expression associated with entertainment (e.g., smiles) remotely from the Web camera in participants' computers (e.g., see Teixeira, Wedel, and Pieters, 2012; McDuff, El Kaliouby, and Picard, 2012; Teixeira, Picard, and El Kaliouby, 2013).

The authors chose the facial expression measure because it unobtrusively captures facial expressions such as smiles without significantly impacting viewers' decisions to view or cease to view. The output of the facial-coding system is a probability measure associated with the intensity of expressed entertainment in the form of smiles or laughter. As people stop smiling and laughing when they are not entertained anymore, this measure frequently returns to a zero baseline, thus avoiding the common spillover effects associated with other moment-to-moment measures such as dials and other sliding selfreport monitors (Baumgartner, Sujan, and Padgett, 1997). For additional details see McDuff et al. (2012). The entertainment measured in this study measured only smiles and laughter; the average entertainment expressed across the 82 ads was 23.3% (standard deviation 15.9%).

The benefit of this approach is that it is scalable, unobtrusive, and collected in

natural environments (e.g., home or work) where entertainment and other advertising content compete with environmental stimuli for the consumer's attention. Thus, our approach resembles the typical way people consume advertising and is conducive to study the effects of entertainment in a context "in which attention to ad executional factors is not heightened artificially" (MacKenzie and Lutz, 1989), as would be the case in a laboratory setting.

In the process of assessing the impact of entertainment on purchase for the three product categories, the authors looked specifically at other known factors such as prior purchases, prior exposure to the ads, and knowledge of or interest in the product category (MacKenzie, Lutz, and Belch, 1986).

The participants (mean age 26, range 21 to +50 years, 38% male), composed of both students and non-students, participated in return for an Amazon gift card. (To test the system, the first 38 participants were invited to perform the study in the lab.)

Stimuli were a random sample of TV commercials chosen from AdForum, a major repository for advertisements used by professionals in advertising and containing more than 120,000 campaigns. The product categories-confectionery, beverages, and alcoholic beverages-were chosen on the basis of their historical uses of entertainment and humor in advertising (Armstrong, 2010) and the basis of prior research findings that ad attitudes associated with entertaining images are transferred to brand attitudes, to some extent, in these predominantly hedonic and medium involvement categories such as beverages and snacks (Janiszewski and Warlop, 1993) and alcoholic beverages (Voss, Spangenberg, and Grohmann, 2003).

About 40 ads were initially chosen from each category, and this set was reduced to allow for only ads evaluated by an independent judge to have at least some presence of entertainment content. Thus, though the authors tried to focus our research on ads with entertaining content, we do not make any assumptions regarding how "entertaining" or "funny" a commercial is in our analysis. Rather, we measure each respondent's reactions to the amount of entertainment and humor in the ads we tested. (In our estimation, most of the "entertaining" ads [76%] did contain humor, but there were ads with smile-evoking content that most people would not regard as "funny"; for example: cute animals, animation, visual imagery, and "feel-good" scenes [24%].)

The final list of confectionery ads was made up of 24 commercials from 8 brands (Cadbury, Dentyne, M&Ms, Skittles, Snickers, Starburst, Stride, and Trident). Beverage ads were made up of 35 ads from 15 brands (Coca Cola, Coke Zero, Cravendale, Cumberland Farms, Diet Pepsi, Glaceau Vitamin Water, Lipton Brisk, Mountain Dew, Muscle Milk, Pepsi, Pepsi MAX, Red Bull, Snapple, Sobe, and Sun Drop). Alcoholic beverage ads were made up of 23 commercials from seven brands (Bud Light, Bud Light Lime, Budweiser, Captain Morgan, Dos Equis, Made in Milan, and Ten Cane Rum). Ads were selected to be shorter than 90 seconds and created in the last 2 years.

Each participant was exposed to a sequence of 20 of the 82 TV commercials in a randomized order, with one ad for each brand. Participants saw all alcohol brands and confectionery brands but only a random sample of 5 of 15 beverage brands. With the exception of Bud Light Lime and Made in Milan, all other brands had between two and ten different ad executions each, so as to reduce the influence of a specific creative on purchase intent.

An e-mail was sent to a panel of online participants who had registered to participate in online experiments. Subjects needed to be older than 21 years old, have moderate to low amounts of facial hair (mustache or beard) for their smiles to be detected, and have access to a computer with a webcam. Before the videos, participants were required to answer questions about their prior familiarity and consideration of brands to purchase in the three categories of interest.

After this pre-survey, participants were shown a sample of 20 ads. For each ad, they were told that they could skip it at any time (to avoid forcing exposure). Yet, 82% chose to watch the ads until the end, and this measure was used as a control. After full or partial view of each ad, they were asked about their familiarity with the ad and their intent to purchase the brand.

After all ads were shown, participants were again asked about their consideration ("Which of the following brands would you consider for your next purchase occasion?") for seen and not seen brands.1 They were also asked questions about each product category (frequency of purchase, interest, and knowledge), the degree to which they felt uncomfortable being filmed, the degree to which their ad and brand choices were different from usual,<sup>2</sup> their level of extraversion, their location and type of Internet connection used, and their age and gender. The entire experiment lasted about 45 minutes.3 (See Table 1 for the main measures collected

# TABLE 1

Measures Collected from Survey and Summary Statistics

Measure	Question	Туре	Mean	SD
Purchase Intent	How likely are you to purchase this brand?	11-point scale, anchored by "Not at all likely" to "Very likely"	4.4	2.9
Ad Familiarity	Have you ever seen this ad before (this study)?	Binary, "Yes" or "No"	13.7% (familiar)	34.4%
Age	What is your age?	13 categories between "less than 18" and "more than 50" years	26	9
Gender	What is your gender?	Binary, "Female" or "Male"	37.8% (male)	48.5%
Extraversion	How extraverted are you?	5-point scale, anchored by "Not at all" to "Extremely"	2.9	1.1
Category Frequency	How often do you PURCHASE or CONSUME the following product categories?	5-point scale, anchored by "Never" to "Very often"	3.26	1.12
Category Interest	How INTERESTED are you in the brands in the following product categories?	5-point scale, anchored by "Not at all interested" to "Very interested"	3.27	1.26
Category Knowledge	How KNOWLEDGEABLE are you about the brands in the following product categories?	5-point scale, anchored by "Not at all knowledgeable" to "Very knowledgeable"	3.30	1.08

Note: Involvement is taken as the average of Frequency, Interest, and Knowledge.

and their summary statistics.) Measures not reported were dropped as they pertained to another study (see Teixeira, Picard, and El Kaliouby, 2013).

## RESULTS

The study confirmed that the optimal level at which to entertain viewers during TV ads so as to maximize their intention to purchase has an inverted-U relationship for the 76% (or 62) of ads in the study classified as containing humorous entertainment but *not* for the 24% of ads containing other forms of entertainment (e.g., animation, visual imagery, "feel-good" stories). In other words, too much as well as too little humor entertainment can be

detrimental to the ads' sales impact as can be seen in Figure 1. Further, the analysis revealed that the amount of entertainment that is most associated with higher purchase intent does not vary significantly by (1) product category but varies significantly by (2) level of consumer knowledge with the product or category and by (3) prior exposure to the brand's ads (marginally significant). The authors explain each of these factors in turn.

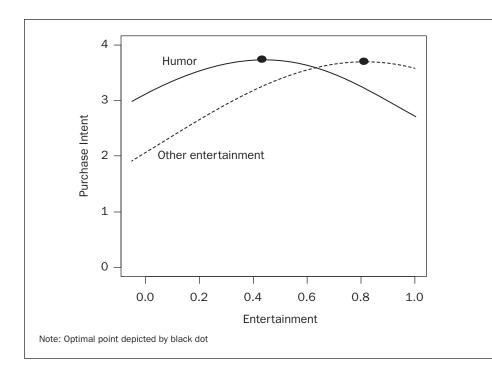
# Entertainment Effects on Purchase by Type of Entertainment

To determine whether humorous entertainment differs from other forms of entertainment used in ads such as

<sup>&</sup>lt;sup>1</sup> Due to lack of consistent variation of this measure, the authors dropped it from the analysis.

<sup>&</sup>lt;sup>2</sup> At the end of the experiment, participants reported low levels of feeling uncomfortable being filmed, mean = 2.1 (standard deviation 1.2), and of choosing differently from usual, mean=1.5 (standard deviation 0.9), on a 5-point scale.

<sup>&</sup>lt;sup>3</sup> 76% of participants reported being at home, 2% at work, and 20% in another location. To pilot the system, the data for the first 38 participants were recorded in a lab. Using or not using, these participants do not qualitatively alter any of the main findings.



# **Figure 1** Optimal Entertainment Effects on Purchase by Entertainment

visual imagery or "feel-good" stories, the authors classified each one of the 82 ads as either having humor present or not having it. Then the authors used this measure of presence of humor in conjunction with the average measures of facially expressed entertainment (e.g., smiles, laughter) recorded by each participant for each ad in a regression. To account for conjectured non-linearities in the latter, the authors used a measure of entertainment and the square of entertainment. The amount of entertainment in ads is standardized on a unit scale such that lack of entertainment expressed by viewers is defined as 0 whereas the ads with the maximum average amount of expressed entertainment are defined to be 1.

In the regression, the authors also controlled for whether the participant decided to view the ad until the end or not view it (completed view), their self-reported level of extraversion, age, gender, and level of involvement with the product category advertised. The authors also controlled for the length of the ad, the point in which the brand first appears (first brand mention), and whether the participant has seen the ad before (familiarity).

The authors found that the use of humor increases purchase intent relative to other forms of entertainment. More interestingly, too much humor reduces purchase intent, but a lot of non-humorous entertainment does not. Here, "more entertainment" means more intensely felt entertainment and not "longer entertaining" ads as we control for ad length. Also note that, as the authors controlled for ad familiarity, this effect is not due to a wear-out of humor in the case of participants having already seen the joke. As for non-humorous entertainment, the more it is present, the higher the intent to purchase the product advertised. The authors also found significant effects for involvement, viewing, extraversion, age, gender, ad familiarity, and ad length (Table 2).

# Entertainment Effects on Purchase by Product Category

To determine the effect of entertainment on purchase by product category, we selected three product categories: beverages, confectioneries, and alcoholic beverages. The authors ran the same regression as in the prior section, this time interaction entertainment-squared with each category dummy. The authors compared confectionery to alcohol ads in Table 3(A) and beverage to confectionery in Table 3(B). Not surprisingly, confectionery has higher purchase intent than beverage, and beverage is higher than alcohol.

In terms of the effect of entertainment on purchase by product category, we found that there was no significant variation in

# TABLE 2

# Regression of Purchase Intent on Entertainment, Humor, and Controls

	Mean	SE	<i>P</i> -value
Intercept	-0.112	0.110	0.308
Entertainment	1.018	0.245	0.000
Entertainment Square	-0.323	0.443	0.466
Humor	0.299	0.039	0.000
Involvement	0.232	0.012	0.000
Completed view	0.265	0.033	0.000
Extraversion	0.072	0.011	0.000
Age	0.022	0.004	0.000
Gender	0.067	0.026	0.011
Ad familiarity	-0.308	0.037	0.000
Ad length	0.003	0.001	0.000
First brand mention	-0.001	0.001	0.294
Entertainment Square * Humor	-0.911	0.294	0.002
Adjusted <i>R</i> Square			0.204

the rate at which the impact of entertainment increases and then decreases purchase intent (Figure 2). The optimal amount of entertainment did not significantly vary across ads of different categories. Yet, the optimal level of entertainment for beverages was the highest, followed by confectioneries. Advertisements for alcoholic beverages benefited from a slightly lower amount of entertainment than the other two product categories. That being said, each product benefited from a medium amount of entertainment within the range of commercials tested in this study-the optimal level for each product category was directly at or close to the midpoint of an inverted-U curve in the [0,1] scale.

As an example of a brand and product (Pepsi Max) using the same media (Super Bowl 2012) but achieving different degrees on purchase intent with three executions of ads using different levels of entertainment, see Figure 2. Both the ads entitled "Catch" and "First Date" achieved less

# Failing to "entertain" viewers at the optimal point suggested by our model resulted in different outcomes among the three product categories tested.

purchase intent (thirteenth and twentysecond percentiles, respectively) by either using too little or too much humorous entertainment. Conversely, "Love Hurts" achieved considerably higher purchase intent (seventy-seventh percentile) by providing consumers with a level of entertainment closer to the optimal amount that the authors found in this research. Incidentally, all ads provided the same amount of informative content regarding the new Pepsi Max product (e.g., "Zero calories. Maximum Pepsi Taste").

Failing to "entertain" viewers at the optimal point suggested by our model resulted in different outcomes among the three product categories tested. Though smallto-medium deviations from the optimal level of entertainment in confectionery and beverage ads did not reduce average purchase intent very much, the impact for alcoholic beverage ads was quite large: In this category, failing to optimize on entertainment levels can mean huge reduction in the persuasive power of ads to induce purchases (Figure 3). For example, doubling the optimal level of entertainment in alcohol ads can reduce average purchase intent by more than one-third.

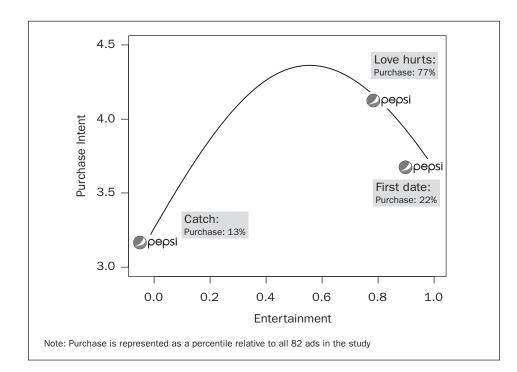
# Entertainment Effects on Purchase by Product Involvement and Knowledge Level In addition to the differences across product category, we determined how the

uct category, we determined how the involvement level (high or low) of consumers with the products advertised might

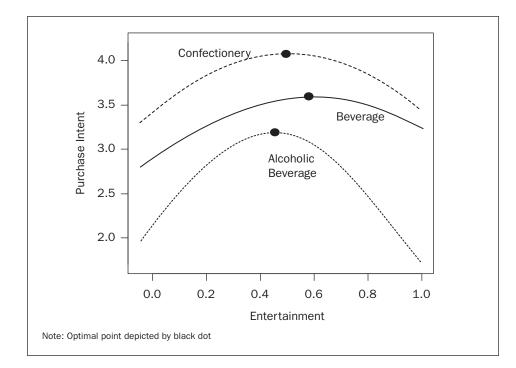
# TABLE 3

Regression of Purchase Intent on Entertainment, Category, and Controls

	Mean	SE	<i>P</i> -value		Mean	SE	<i>P</i> -value
(A) Confectionery versus Alcohol				(B) Beverage versus Confectionery			
Intercept	0.159	0.117	0.176	Intercept	0.337	0.128	0.008
Entertainment	1.173	0.286	0.000	Entertainment	0.709	0.297	0.017
Entertainment Square	-1.193	0.457	0.009	Entertainment Square	-0.707	0.449	0.115
Confectionery	0.192	0.036	0.000	Beverage	-0.221	0.041	0.000
Involvement	0.246	0.014	0.000	Involvement	0.199	0.016	0.000
Completed view	0.283	0.036	0.000	Completed view	0.300	0.042	0.000
Extraversion	0.067	0.013	0.000	Extraversion	0.080	0.014	0.000
Age	0.017	0.005	0.000	Age	0.022	0.005	0.000
Gender	0.050	0.030	0.093	Gender	0.066	0.032	0.039
Ad familiarity	-0.326	0.042	0.000	Ad familiarity	-0.252	0.042	0.000
Ad length	0.002	0.001	0.067	Ad length	0.001	0.001	0.248
First brand mention	-0.002	0.001	0.004	First brand mention	-0.002	0.001	0.048
Entertainment Square * Confectionery	/ –0.134	0.272	0.621	Entertainment Square * Beverage	0.115	0.279	0.680
Adjusted R Square			0.228	Adjusted <i>R</i> Square	•••••	•••••••••	0.148



**Figure 2** Purchase Intent for Three Executions of Ad Launching Pepsi Max in 2012



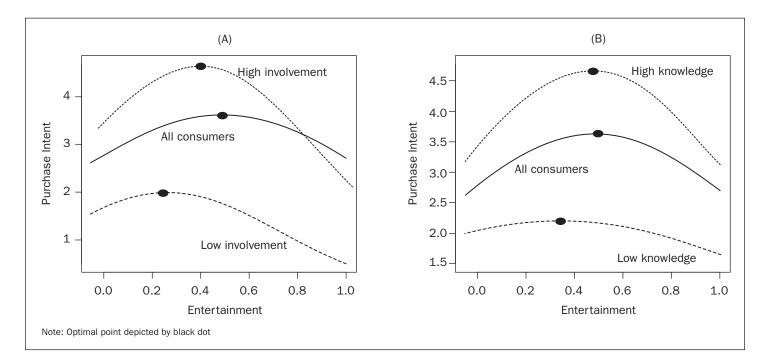
# **Figure 3** Optimal Entertainment Effects on Purchase by Product Category

affect the optimal level of entertainment in an advertisement. Some consumers are highly involved when evaluating ads and purchasing in a category whereas others are not. To the extent that these differences impact attention to the ad and elaboration of the message claims, it should impact the optimal level of entertainment to be used in ads. Similarly we looked at the effects of entertainment in relation to the consumer's knowledge of the brand or product category. The authors ran the corresponding regressions as before, in this case interacting entertainment-squared with either involvement or with knowledge.

When stating interest to buy a particular brand in response to an ad exposure, the involvement level of the consumer plays an important role. Looking at the entire dataset, the ideal quantity of humorous entertainment to use is a "medium" amount-as the authors found in the analysis reported in Figure 1. As Figure 4 shows, however, the optimal amount of entertainment when addressing an audience of low-involvement consumers seems only slightly less (p = 0.46) than the optimal level for high involvement consumers, regardless of the category. Not surprisingly, the main effect of involvement is significant: High-involvement consumers are more likely to purchase the advertised brand.

A similar but significant effect was observed for product knowledge (i.e., the consumer's prior knowledge of products). This effect is driven by high-knowledge consumers. There was not a very significant change in purchase intent at different entertainment levels for low-knowledge respondents. Therefore, there is a low risk of entertaining these consumers too much (or too little) in a commercial. In contrast, the data indicate that when addressing highly knowledgeable consumers, the amount of entertainment in ads does matter.

Figure 4 (right side) shows a sharp decline in the positive effects of entertainment on



**Figure 4** Optimal Entertainment Effects on Purchase by Consumer Involvement (A) and Knowledge (B)

# TABLE 4

Regression of Purchase Intent on Entertainment, Involvement, or Knowledge and Controls

	Mean	SE	<i>P</i> -value		Mean	SE	P-value
(A) Involvement				(B) Knowledge			
Intercept	0.219	0.109	0.045	Intercept	0.260	0.108	0.016
Entertainment	1.098	0.246	0.000	Entertainment	1.071	0.246	0.000
Entertainment Square	-1.440	0.563	0.011	Entertainment Square	-1.938	0.499	0.000
Involvement	0.229	0.016	0.000	Knowledge	0.027	0.025	0.277
Completed view	0.276	0.033	0.000	Involvement	0.194	0.024	0.000
Extraversion	0 071	0.012	0.000	Completed view	0.276	0.033	0.000
		0.004	0.000	Extraversion	0.069	0.012	0.000
Age				Age	0.021	0.004	0.000
Gender	0.061	0.026	0.021	Gender	0.055	0.026	0.037
Ad familiarity	-0.319	0.037	0.000	Ad familiarity	-0.316	0.037	0.000
Ad length	0.002	0.001	0.037	Ad length	0.002	0.001	0.033
First brand mention	-0.002	0.001	0.025	First brand mention	-0.002	0.001	0.020
Entertainment Square * Involvement	0.097	0.131	0.462	Entertainment Square * Knowledge	0.261	0.111	0.019
Adjusted <i>R</i> Square			0.190	Adjusted <i>R</i> Square	••••		0.192

purchase intent when the level of entertainment is not optimal among this group.

# Entertainment Effects on Purchase by Prior Exposure to Ad

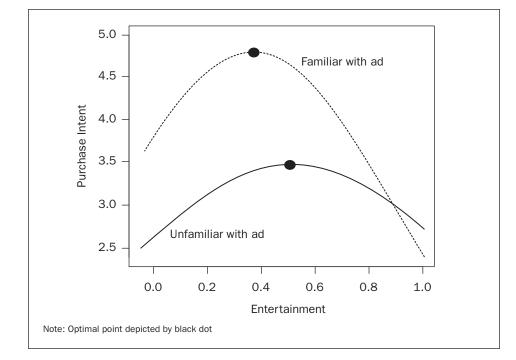
Finally, the authors examined whether a consumer's prior exposure to the ad had an effect on the optimal amount of entertainment placed in an advertisement. They looked at the difference between the effects of entertainment on consumers who were familiar or unfamiliar with a particular advertisement. The authors found a significant main effect of familiarity. They also found that it is effective to use less entertainment for consumers familiar with the brand's ads (marginally significant) and that there is a high risk of using too much (or too little) entertainment in these cases (Figure 5 and Table 5). For consumers unfamiliar with an ad or product, it is beneficial to use more entertainment, and there is less of a risk of using too much entertainment. In sum, advertisers wishing to target

a selected audience with multiple ads of a brand or with the same ad multiple times should be particularly cognizant that using the optimal amount of entertainment can affect the ad's impact on sales.

## DISCUSSION

This research investigated to what extent the level of entertainment in television commercials (as measured by consumer facial reactions) influences advertising effectiveness as measured by purchase intent. The authors thus added to this body of knowledge by showing how different levels of entertainment operate in three product categories: beverages, confectionery, and alcohol. In doing so, they attempted to answer the question: What is the appropriate level of entertainment to evoke in different types of consumers to maximize intention to purchase?

This is an important issue for marketers today as rising competitive clutter in the marketplace, DVRs, and multi-tasking are



# **Figure 5** Optimal Entertainment Effects on Purchase by Prior Ad Exposure

# **TABLE 5**Regression of PurchaseIntent on Entertainment,Ad Familiarity, and Controls

	<b>J</b> /		
	Mean	SE	<i>P</i> -value
Intercept	-0.450	0.078	0.000
Entertainment	1.115	0.246	0.000
Entertainment Square	-1.070	0.359	0.003
Familiarity		0.046	0.000
Involvement	0.235	0.012	0.000
Completed view	0.278	0.033	0.000
Extraversion	0.071	0.012	0.000
Age	0.021	0.004	0.000
Gender	0.062	0.026	0.019
Ad length	0.002	0.001	0.038
First brand mention	-0.002	0.001	0.026
Entertainment Square * Familiarity	-0.669	0.365	0.067
Adjusted <i>R</i> Square			0.190

threatening attention to advertising and causing ad agency creatives to add more entertainment in order to increase the chances that ads get noticed (CNN, 2007). Obviously, even if entertainment increases attention to an ad, that would be not be a successful strategy if that entertaining content diminishes the persuasive impact of the ad.

Controlling for viewing desire, the authors found that entertainment does indeed play both a positive, persuasive, role but also a negative, detrimental, role. As the authors found that the optimal amount of entertainment varies depending on the consumer's category knowledge, ad familiarity, and type of entertainment attended to but not on product category or involvement, it becomes crucial to understand just how much entertainment to use and under which circumstances to use it in ads. Figure 6 compares the optimal level with which to entertain viewers by circumstance.

Maximizing the positive impact of entertainment requires deciding what the main purpose of the ad is. If the ad is solely intended to induce purchase from knowledgeable or involved consumers, higher levels of entertainment are recommended. This should be the case for established brands or mature products. If the purpose of the ad is to generate awareness and interest, for example for new brands or products, and other marketing tools will be used to trigger purchase, higher entertainment is optimal for the unfamiliar consumer. For the low-involvement, low-knowledge consumer, however, particularly for new ads using humor, less entertainment may be optimal. This is particularly the case of ads for alcoholic beverages, where failure to optimize the level at which to entertain consumers has non-negligible consequences.

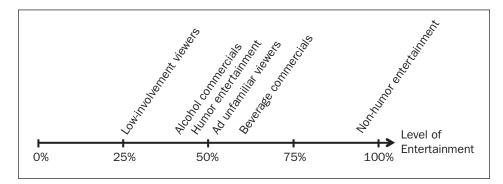
Finally, the authors also looked at the placement of the entertainment in the ad, that is, whether it comes before or after the brand first appears. The finding that entertainment after the brand appearance (or together with the brand) is more effective confirms what marketers told us: Entertainment and humor must be linked to the brand to be effective. For more on this, see Teixeira, Picard, and el Kaliouby (2013).

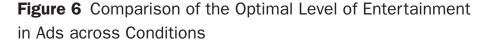
# Maximizing the positive impact of entertainment requires deciding what the main purpose of the ad is.

This research looks only at the effects of entertainment in the short term as a result of a single ad exposure. The optimal mount of entertainment to use in ads for higherfrequency exposures might be higher than what the authors report here, as entertaining ads may be more memorable, or lower, as entertaining ads may detract even more from viewers memorizing brand-related content. Another limitation of this study and one that future research should consider is testing commercials within the context of TV programs and the use of actual purchase versus purchase intent. This may or may not affect the main results, quantitatively.

The authors believe the results hold qualitatively, nonetheless, as they are supported by prior theoretical and empirical literature. On the plus side, the experimental design allows for viewers to avoid watching ads that they would not want to see at home and, in addition, to be influenced by ads of competing brands.

Last, the authors found that humor acts differently from non-humor content. Indeed, prior research on the relationship between the amount of humor in ads and memory for brand claims has argued that high levels of humor compete for the viewer's processing





resources, thus reducing the ad's effectiveness (Krishnan and Chakravarti, 2003). One conjecture is that this interference does not occur for high levels of non-humor entertainment. Future research should attempt to explain why there is an optimal (i.e., midpoint) level for the most effective use of humorous entertainment in TV ads but not for use of non-humorous content, wherein the more the better.

#### SUMMARY

As entertainment in advertising is becoming more important to break through the clutter, the authors have found that there seems to be little research exploring the optimal level of entertainment and humor in television commercials. This study shows that finding the optimal level does matter, that it differs between humorous and other entertainment content but not across the three product categories studied herein and depends on a number of other factors such as the consumer's prior ad familiarity and knowledge for the category. Important is that the study showed that a high level of entertainment in advertisements might come at the expense of the persuasiveness of the ad in driving purchase. The legendary adman David Ogilvy declared in 1963 that the advertiser should "resist the temptation to entertain"; in 1985, he argued that entertainment can sell. Our research shows he was right both times-it is important to find the right balance.

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