
# How Consumers Process Advertising Campaigns

**See all or only the best?**

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June 21, 2010

# Introduction

From economic behaviors to medical and political opinions, studies have repeatedly demonstrated that human information processing is full of errors and biases. Might reactions to advertising be subject to the same kind of errors and biases? Surprisingly, little research has been conducted regarding that question despite the considerable number of market research projects focused on measuring advertising effectiveness. Even today, the elements behind successful advertising remain poorly understood.

Take advertising campaigns as an example. Every year millions of dollars and countless hours are spent on developing campaigns with “legs” as opposed to simply creating several one-off ads. Producing campaigns is thought to be more effective because campaigns are able to better communicate the overall branding message, thus leaving a stronger, longer-lasting impression on viewers. This is based on the commonly-practiced assumption that a series of ads in a campaign has an additive effect that is similar to cumulative learning of skill sets or abstract thinking. With this logic, the end outcome of processing a series of related commercials is greater than that of simply processing one, solo commercial.

When viewed from the perspective of cognitive psychology, campaign effectiveness tells a drastically different story. In cognitive theories of information processing, most information is discounted or ignored—only the most pertinent information is stored. Our brains do not store everything because they strive to process information efficiently, which often sacrifices accuracy. As a result, we are prone to making errors, giving different weights to different information in order to achieve maximum efficiency. Cognitive psychology calls these errors “fundamental attribution errors”. Chief among them is the one caused by salience. If there are two pieces of information with different degrees of salience, competing for our attention, the more salient one dominates our information processing, causing us to make conclusions solely based on that piece of information. With this view, campaigns can only be as effective as the most salient individual ad within the campaign (e.g., the best performing one), which contradicts a cumulative campaign-level, gestalt effectiveness.

# Conventional Wisdom: Heuristics and False Consensus Effect

Why has the advertising industry invested so much for so long in developing campaigns without questioning a campaign's utility? Theories of social psychology suggest that the false consensus effect combined with representativeness heuristic and self-serving bias might be at work. According to these theories, we interpret the world from our own perspective (Pronin, 2008), greatly overestimating the probability of others sharing the same opinion (Ross, Greene, & House, 1977), even when we know that our estimate does not conform to the laws of probability (Gilovich & Savitsky, 2002).

The representativeness heuristic influences our thinking because it just "feels right" and therefore leads us to conclude it must be true. The real-life examples of conventional wisdom, borne out of the representativeness heuristic, are abundant, e.g., not drinking milk when you have a cold to avoid the build up of additional phlegm, believing vegetarians are less aggressive than carnivores, assuming tall people are more intelligent, and so on. In these instances, we are simply taking an attribute of one property and transplanting it onto another, even though there is no real, scientific connection. In the case of advertising campaigns, the representativeness heuristic seems to stem from our mathematical learning. It feels natural to think that if 1+1=2, one ad plus another ad should result in an effect that is equivalent to 2.

Another factor contributing to this campaign effect appears to be our tendency to overestimate the effectiveness of our own communication (Pronin, 2008). For example, when romantic couples were interviewed soon after a break-up and asked to estimate the clarity of their communication during the emotional event, each rated his or her own communication significantly clearer than their partner's communication, which was unclear and sent mixed signals (Pronin, Puccio, & Ross, 2002). Believing their advertising clearly communicates the intended message, advertisers further strengthen their faith in the campaign effect of 1+1=2.

Not only do we believe our communication is clearer than it probably is, but we also overestimate how many people share our belief. This false consensus effect is well-documented across a wide range of religious, political, and stereotypical opinions (Mullen et al., 1985). Under the false consensus effect, we become much more certain about our views and confident in our decisions, believing that many others share our viewpoints. If I believe that a campaign is more effective than one-offs, then I also think everybody else believes the same thing, then I become more certain of the effect. This feeling of knowing serves as a confirmation of facts (Burton, 2008) instead of just opinion.

Has the mere feeling of knowing, rather than the knowledge of facts, caused many advertisers to accept the notion that a campaign works better than one-offs in advertising? Do viewers agree?

# Efficient Processing & Fundamental Attribution Error

Recent advancements in neuroscience and psychology have shown that our brains strive for efficient processing rather than full, complete processing. Given the choice between using the least amount of processing power to find a good-enough solution and using more power to find the best possible solution, we usually prefer the former (Montague, 2006). Mindful that attention is a scarce resource (Lanham, 2006), our brain factors in the diminishing return of additional attention and processing and goes for faster, easier solutions, taking shortcuts. In so doing, our brains have evolved as an optimized kluge, not a perfect supercomputer (Marcus,2008).

This haphazard evolution serves us fairly well; we benefit from powerful intuitions (Gladwell, 2005; Myers, 2002), but we also suffer from many fundamental attribution errors (Gilbert, 2002; Ross, 1977). In its simplest form, the fundamental attribution error refers to our tendency to make an overall assessment based only on the most salient piece of information. Rather than considering all available information, we make snap judgments about whether or not something is good or who is to be credited or blamed. The rest of the information (i.e., non-salient information) is ignored or discounted. We are usually not aware of this activity, and even when we are confronted with the evidence, we do not rush to correct the earlier misjudgment (Gilbert, 2002). Instead, we rationalize it. In today's environment where consumers are bombarded with advertising, the most sensible behavior for consumers' brains to do is make snap judgments about the advertisement—form an opinion and move on. In other words, salience plays a large role in advertisement processing. With regard to campaign effectiveness, evidence on the salience effect suggests that a campaign is only as powerful as the most salient ad in the campaign. When presented with a campaign, viewers only process the most salient ad in the series.

Many advertisers intuitively understand this and measure the extent to which their commercials break through the advertising clutter. Often, however, they fail to understand that our brains respond more strongly to negative salient information because it represents a threat (Hamilton & Gifford, 1976). When the compounding salience effect of negative information is not considered, a controversial or offensive ad can be borne out of sincere efforts to create an ad that breaks through. Like word-of-mouth, salience cuts both ways.

In summary, we have two conflicting views on campaign effectiveness. Conventional wisdom states that campaigns are more effective than their individual ads because campaigns benefit from cumulative knowledge. The attribution theory on the other hand maintains that a campaign is only as good as the most salient ad in the campaign, which, in the absence of negative information, means the campaign is as effective as the best ad in the campaign. The following study is designed to gather empirical data and offer an answer.

# Research Design

For practical reasons, this study uses existing real-life TV commercials. The most scientifically rigorous design for the experiment would be to have three advertising exposure conditions - (i) no exposure, (ii) exposure to individual ads only, and (iii) campaign only—all for the same product and with the same commercials. In reality, we could not find an advertiser engaged in such a practice. Therefore, we selected the last two conditions for the experiment and manipulated exposure in a survey environment. We consider the individual ads a control group and the campaign an experimental group.

## Campaign Selection

The campaigns for the study were selected according to the following criteria.

To control for the impact of brand image:

- The same group of ads were used both for the control and experimental conditions
- Six well-known national brands were selected from various industries (Domino's, Gillette, Hanes, Kraft, Toyota, and Walmart)
- None of the six brands represented a niche product or a niche target segment
- The selected campaigns represented a wide range of individual advertising effectiveness as determined by Ace Scores (ranging from 451 to 665 on a scale of 1 to 950)

To control for the impact of a particular creative style:

- The selected campaigns represented diverse creative styles from employee testimonials (Walmart) to man-on-the-street (Domino's) to celebrities (Gillette) and humor (Toyota)
- None had an extremely negative element that might be construed as offensive
- All were 30-second spots created by major agencies

To maintain the highest relevance to respondents:

- All selected brands were engaged in a national TV ad campaign at the time of survey

To minimize the effect of repeat exposure:

- The number of ads in each campaign was normalized to three
- Each respondent saw only one ad or one campaign during the experiment (between subjects design)

The following list presents the 6 brands/campaigns used in the experiment:

- Domino's Pizza – New Recipe
- Gillette: Fusion Pro-Glide Razor – Celebrity Ambush
- Hanes: Lay-Flat Collar – Michael Jordan Bacon Neck
- Kraft: Mac & Cheese – Parents Eating Kids' Meals
- Toyota: Sienna – Meet the Family
- Walmart – Rollback

Table 1, below, lists the corresponding 18 ads and their Ace Scores. Individual ads within the campaign are listed in the order of their first air date.

Notes:

1. Ace Scores represent the summarized, overall effectiveness score of advertising content
2. Variables in the Ace Score calculation include desire, relevance, information, attention, change, likeability, and watchability
3. Media weight is not part of Ace Score calculation
4. Refer to Ace Metrix (www.acemetrix.com) for a more in-depth discussion of Ace Scores

Table 1

| Brand | Campaign/Ad Title | Ad's Ace Score |
|---|---|---|
| **Domino's** | **New Recipe** | |
| | They Face Criticism & Change Recipe :30 | 665 |
| | Chefs Surprise Critics With New Pizza | 626 |
| | Pizza Holdouts Ad Campaign | 605 |
| **Gillette** | **Celebrity Ambush** | |
| | Kyle Busch: Young Guns Crash Wedding | 535 |
| | Derek Jeter Surprises Man In Bathroom | 451 |
| | John Cena: Are You Ready | 503 |
| **Hanes** | **Michael Jordan Bacon Neck** | |
| | Michael Jordan: Bacon Neck | 550 |
| | Michael Jordan: Look Feel And Sell Good | 528 |
| | Man Tries To Get Comfortable | 542 |
| **Kraft** | **Parents Eating Kids' Meals** | |
| | Gets A Time-out | 581 |
| | Girl's Dad Skims Mac And Cheese | 576 |
| | Mother Steals Daughter's Macaroni | 552 |
| **Toyota** | **Meet the Family** | |
| | Swagger Wagon | 454 |
| | Mommy Takes Time Out In Mini Van | 528 |
| | Dad Lets Kids Wash Vehicle | 497 |
| **Walmart** | **Rollback Campaign** | |
| | Rollback Time: Dorrell | 575 |
| | Mr. Rollback Has Tide | 540 |
| | Darrell: Grasshopper Pie Ice Cream | 534 |

## Stimulus Materials

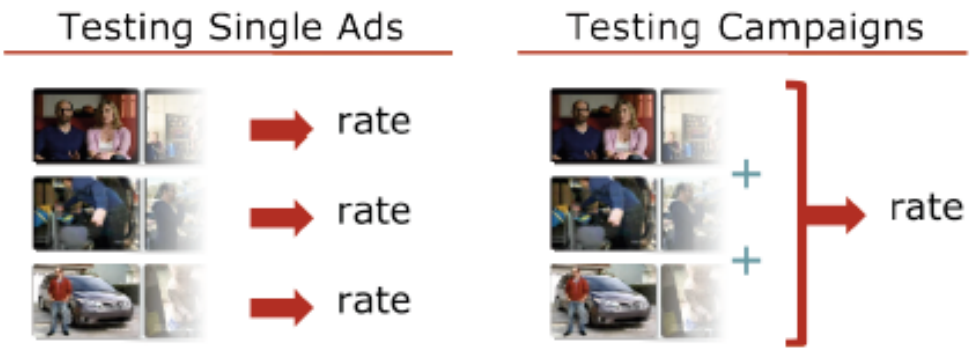
In addition to 18 individual ads pulled from the on-air television broadcasts, 6 campaigns were created by splicing three ads together for each campaign. Hence a total of 24 stimulus materials were used in the experiment; each was presented to an independent group of respondents.

## Participants and Survey Methods

The study was conducted via online survey with forced exposure. The participants were recruited from three independent panel companies, each with their own nationwide consumer panel. Men and women aged 16-65 participated. Other demographics were representative of the national population. No product or brand-related screener criteria were used as the purpose of the study was to represent the audience of a TV broadcast.

Twelve thousand respondents participated in the study. Each stimulus material was presented to an independent sample of 500 respondents balanced in gender, age, and income.

In the control condition, each respondent viewed one TV commercial and rated it. In the experimental condition, each respondent viewed a campaign (3 ads presented in order) and rated it. The illustration below shows the difference.




The individual ads were tested within a week of their first appearance on TV, most in May and June 2010. The campaigns were tested in June 2010 (6/11–6/13).

# Hypothesis

a) If advertising processing is similar to cumulative learning, as conventional wisdom suggests, a campaign should have a greater impact than any one ad in the campaign. Thus, the experimental group's score (campaign score) should be significantly higher than the highest individual ad score given by the control group, indicating a campaign "lift".

b) If advertising processing is similar to cognitive information processing, the campaign score should be equal to that of its best performing ad, as that ad is the most salient one in the absence of extremely negative information. Hence, there will be no campaign "lift."

# Results

The lift is calculated by first subtracting the control group's highest ad score (maximum ad score) from the experimental group's score (campaign score) and then indexing the resulting difference against the maximum ad score (e.g., if the maximum score is 500 and campaign score is 550, the lift is 10%).

Table 2, below, presents the list of all individual ads and campaigns with their respective Ace Scores and each campaign's effectiveness lift. None of the lifts is statistically significant, confirming Hypothesis (b).

Campaigns, regardless of their brand or creative style, showed neither cumulative effect as suggested by conventional wisdom nor the possible averaging effect as rational, complete information processing might suggest. Instead, they showed almost the same effectiveness level as the highest performing ad in the campaign. It is safe to conclude that advertising processing follows the general pattern of other types of human information processing. When presented with multiple pieces of information, consumers tend to process the most salient piece and ignore the others.

**Table 2**

| Brand | Campaign/Ad Title | Ad's Ace Score | Campaign's Ace Score | Lift (%) |
|---|---|---|---|---|
| **Domino's** | **New Recipe** | | **669** | **0.6%** |
| | They Face Criticism & Change Recipe :30 | **665** | | |
| | Chefs Surprise Critics With New Pizza | 626 | | |
| | Pizza Holdouts Ad Campaign | 605 | | |
| **Gillette** | **Celebrity Ambush** | | **548** | **2.4%** |
| | Kyle Busch: Young Guns Crash Wedding | **535** | | |
| | Derek Jeter Surprises Man In Bathroom | 451 | | |
| | John Cena: Are You Ready | 503 | | |
| **Hanes** | **Michael Jordan Bacon Neck** | | **555** | **0.9%** |
| | Michael Jordan: Bacon Neck | **550** | | |
| | Michael Jordan: Look Feel And Sell Good | 528 | | |
| | Man Tries To Get Comfortable | 542 | | |
| **Kraft** | **Parents Eating Kids' Meals** | | **593** | **2.1%** |
| | Gets A Time-out | **581** | | |
| | Girl's Dad Skims Mac And Cheese | 576 | | |
| | Mother Steals Daughter's Macaroni | 552 | | |
| **Toyota** | **Meet the Family** | | **533** | **0.9%** |
| | Swagger Wagon | 454 | | |
| | Mommy Takes Time Out In Mini Van | **528** | | |
| | Dad Lets Kids Wash Vehicle | 497 | | |
| **Walmart** | **Rollback Campaign** | | **600** | **4.3%** |
| | Rollback Time: Dorrell | **575** | | |
| | Mr. Rollback Has Tide | 540 | | |
| | Darrell: Grasshopper Pie Ice Cream | 534 | | |

Notes:

1. The ad score in bold indicates the maximum ad score within each campaign
2. Lift = (campaign score - maximum ad score) / maximum ad score

# General Difference

A further analysis of the data unveiled a weak but interesting pattern. Males and females seemed to react differently depending on the campaign's creative style. The six selected campaigns presented two distinct creative approaches: (i) a narrative, fairly linear approach that requires viewing the ads in order to fully understand the campaign and (ii) a non-linear approach using multiple variations of a theme that does not require viewing in chronological order. The gender difference was found along this difference in creative style.

As shown in Table 3, below, male respondents displayed a positive lift to campaigns with a non-linear approach while showing a negative lift to those with a narrative, linear approach. Female respondents showed the opposite pattern.

**Table 3**

% Lift from Best Ad

| | Gillette | Hanes | Kraft | Domino's | Toyota | Walmart |
|---|---|---|---|---|---|---|
| Male | +5.2% | +2.8% | +4.7% | -1.3% | -2.5% | -2.5% |
| Female | -0.6% | -4.2% | -0.8% | +6.6% | +4.0% | +9.2% |

Although these differences are not big enough to be statistically significant, they suggest an interesting finding that merits a future study.

# Conclusions and Implications

The study results clearly showed that advertising processing is subject to common errors of human information processing, such as the fundamental attribution error. For advertising campaigns, what determines the overall effectiveness of a campaign is its best-performing ad.

When individual ads show different levels of effectiveness, it is as if consumers only see the best spot in the series and do not even notice the rest. Media spend behind those relatively weaker ads is being wasted. A higher ROI can be achieved when advertisers pay attention to individual ad's performance and discontinue weaker ads instead of running them in the hopes of benefiting from the cumulative power of the campaign.

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