

Reconsidering Recall and Emotion in Advertising

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Recall, one of the key metrics in advertising testing has been criticized over the years as favoring rational advertising over emotional advertising. An analysis and reconsideration of the available evidence show that emotional advertising is not penalized by recall, and that emotional content in well-executed commercials can actually boost recall. Strong empirical evidence shows that recall, when used in combination with other measures, is a valid measure of advertising effectiveness and, as the analysis here illustrates, does not miss the emotion in advertising that builds brands.

INTRODUCTION

Recall is one of the several major measures used in advertising effectiveness testing today, in addition to others such as persuasion and advertising liking. However, despite a strong base of empirical validation, recall has been among the most criticized of the measures. And while many of these criticisms have long since been resolved, doubts about the measure linger from the days when recall was used by many as the solitary indicator of advertising effectiveness.

Among the more important of the historical criticisms of recall was that it favors more “rational” commercials over more “emotional” ones. During the late 1970s and early 1980s, several researchers suggested and reported that the recall of rational commercials was, on average, higher than the recall of emotional ones. This viewpoint subsided in later years as other research and the reanalysis of the early studies showed no inherent disadvantage. Additionally, several important validation studies in the past two decades have delivered strong independent empirical evidence of the role of recall in identifying commercials that produced higher in-market business results. Recently though, Unilever along with one of its research partners, Ameritest, has resurrected the issue and concluded “recall misses the emotion in

Advertising that builds brands,” using new data to bring into question once again the value of recall when measuring emotion based advertising (Kastenholz and Young, 2003).

This article recaps the state of knowledge on the important subject of recall and emotion in advertising and helps show more clearly the value of recall in current advertising research. Although the days of recall as the sole measure of advertising effectiveness have long since passed, the analyses here show it is an important evaluative tool for understanding the effectiveness of both types of advertising, emotional or rational.

BACKGROUND

Advertisers have long believed that advertising must arouse some emotion to be effective. This affective response is important for two main reasons. First, the key to branding is the triggering of a meaningful emotional response, which is often, and perhaps always, the major benefit of using the particular product. Second, the process that consumers go through in deciding what brands to buy has a heavy emotion-based dimension to it. In both cases, advertising can be an effective source of enhancement of these emotional responses.

While there is agreement about the need for an emotional response to advertising in order for it

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to be effective, there is little agreement among advertising researchers about how *exactly* emotion works to influence the overall impact of advertising, or even how emotional response in advertising can be measured or evaluated. As debate about how to measure advertising effectiveness continues, the issue of recall, one of the leading measures of advertising intrusiveness, and its connection with emotion is sometimes at the center of the debate. Or more precisely, some critics of recall even question whether there is an interaction between the two at all. What is the relationship between recall and emotion in advertising? It is clear that the answer to this question is important in better understanding how best to test advertising for its effectiveness.

SALES VALIDITY OF RECALL

The issue of the validity of recall needs to be briefly summarized before recall's relationship with emotion is discussed. Any true measure of advertising effectiveness must show validity in predicting future in-market performance. All major copy testers have their own empirical support demonstrating the validity of their measures. While they often place different emphasis on their measures (particularly among recall, persuasion, and advertising liking), that recall has value in evaluating advertising effectiveness is nearly universally accepted, with a variety of supplier and independent studies demonstrating its sales validity (e.g., see Dubow, 1994; also IRI's "How Advertising Works" study by Lubetkin, 1991 and Lodish et al., 1995, although some authors have minimized the findings of this study *after* removing

some of the data points/so-called "outliers," by no means does the research show "... no evidence of a relationship between related recall scores and sales effects ..." as Kastenholz and Young, 2003 concluded). Additionally, the Advertising Research Foundation Copy Validity Research Project (ARF CRVP; Haley and Baldinger, 1991) found recall to be a valid measure of advertising effectiveness, second only to advertising liking.

CONCEPTUAL FRAMEWORK: EMOTION, ATTENTIONING, AND MEMORY

To understand how emotion works in advertising or how it interacts with the recall measure in advertising testing, a basic knowledge of the memory process is useful. Memory is a critical part of consumer behavior and of how advertising influences consumer behavior. Consumers usually do not make brand purchase choices at the time of advertising exposure; rather, it is the *memory* of the advertising messages that influence consumers. Recall's importance stems from the fact that recall measures some aspect of this memory of the advertising.

New advances in our understanding of how the brain functions have helped clarify how consumers respond to the deluge

of media stimuli around them, and how memory is built. The process of Attentioning is said to govern what stimuli should be given attention, with memory traces being formed or strengthened based on the *length* and *depth* of attention given to a particular stimulus. The longer and deeper the attention, the stronger the memory traces. As a result, when conscious learning is the goal, focused attention is given to the material at issue, and the attention is kept on it as long and as much as necessary. Clearly, recall is valid in terms of measuring this learning as almost all educational testing is based on it. But a lot of learning is incidental and some researchers feel that advertising that works via incidental learning can be effective. Is recall also important for this type of learning?

Neurologists today are suggesting that the attentioning process is largely out of the conscious control of the individual, and emotion rather than cognitive/rational response guides attentioning (see du Plessis, 1998, for discussion; Zaltman, 2004). Some initial emotional response, it seems, is important to decide if conscious effort will be focused on the stimuli. Even when no conscious effort and deliberate attention is focused on something because it was dismissed by the attentioning process as not worthy of further attention, it appears reasonable to expect some memory may be formed/strengthened by virtue of the attentioning process itself. It also seems reasonable that this should be

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further reinforced by repeated exposure to the stimulus even if the stimulus does not receive conscious attention—because of repeated attentioning—and can be expected to create some measurable memory traces of the stimulus even without conscious learning. Recall should be able to tap into this memory as well (this is memory, regardless as how it was created), and the emotional response in the initial attentioning process should thus influence recall.

Recall measurement requires verbal proof of advertising exposure. The traditional criticism against recall vis-à-vis emotion that “feeling” advertisements, advertisements with high emotional content that are expected to evoke emotions, will be penalized by recall compared to “thinking” advertisements, is based on this requirement of verbal proof. It is argued that because the emotive content is important in feeling advertising, respondents would have difficulty verbalizing their memory of these types of commercials. This view was reinforced by the earlier brain theories that believed that the two hemispheres of the brain functioned individually, and that the left-brain functions included verbal and cognitive issues while the right-brain functions included nonverbal image and picture memory functions and storage.

Brain theorists today, though, do *not* agree with the two hemisphere/left-right brain division. In fact, there is only one memory of the advertising that includes all elements: the visuals, music, words, experiences, etc. Further, the memory trace is distributed throughout the brain, raising questions about the commonly accepted emotional/cognitive advertising and recall relationship (see du Plessis, 1998).

Against this conceptual backdrop, research findings discussed below show how recall and attention, whether conscious or not and based on the attentioning pro-

cess, are related, as well as how emotional advertising is not penalized by recall. In fact, under some situations or when influenced by moderating variables, highly emotional advertising actually *enhances* recall.

RECALL AND ATTENTION

Does recall measure attention? It is generally accepted that the two have a moderately strong, positive correlation. Kastenholtz and Young (2003), however, report a very low correlation between ASI recall and Ameritest attention, which is based on asking what commercials are found *interesting*, and a low negative correlation between ASI recall and Millward Brown (MB) attention, which is based on the claimed *active enjoyment* of commercial, but a stronger positive correlation between ASI recall and ASI attention, which is based on recognition of the advertising via a verbal description (see Table 1). These results are then used to argue that ASI recall and MB/Ameritest attention cannot be both measuring “breakthrough” power, and the strong positive relationship between ASI recall and ASI attention is explained as “. . . probably because both ASI measures are fundamen-

tally derived from the attempts to describe television commercials in *words*” (p. 51).

This conclusion, however, does not reconcile with other findings. Our research has shown that there is a moderately high, positive correlation between recall (similar to ASI’s and described by respondent in words) and attention obtained from recognition of the advertising via reexposure to the actual advertising, and *not* via a description of the advertising *in words* (see Table 2). The results do show that Ameritest and MB attention are different from ASI and Gallup & Robinson (G&R) attention, but the reason offered (ASI’s verbal cue) does not seem to hold up in light of G&R nonverbal-based results. The better question may be whether “interesting” as in Ameritest attention and “active enjoyment” in MB attention are really about “breakthrough”? The concepts of “interest” and “active enjoyment” seem closer to a positive reaction *after* attention or breakthrough: something could be noticed and remembered even if it is not necessarily found to be “interesting” or “enjoyable.” Stapel (1994) reports that

TABLE 1
Correlations between
“Breakthrough” Measures
of Different Pretesting
Systems and Recall

	ASI Recall
ASI attention	.67**
Ameritest attention	.09
MB attention	-.28*

Source: Kastenholtz and Young (2003)

*Significant at 95% CL

**Significant at 99% CL

TABLE 2
Correlations between
“Breakthrough” Measure
and Recall

	G&R Recall
G&R attention (recognize advertising/ noted advertiser)	.45**
G&R attention (recognize advertising)	.42**

Source: G&R (2003)

**Significant at 99% CL

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among respondents who neither liked an advertisement nor found it interesting, a substantial proportion recalled the advertisement (30 percent) or recognized the advertisement (59 percent). Among those who found the advertisement interesting, substantially more recalled the advertisement (66 percent) or recognized it (87 percent).

RECALL AND ADVERTISING LIKING

Interest in advertising liking as a successful advertising effectiveness measure increased after it was found by ARF CRVP to be strongly predictive of a commercial's in-market sales performance. Although based on a limited data set (five pairs of commercials for established packaged good products), the CRVP finding has caused attention to be focused on understanding what advertising liking is and how it relates to recall.

Biel (1990) suggested that advertising liking may be a valid copy test measure because respondents may have a positive first impression on a visceral or “gut” level and thus may be likely to process the advertising more fully. Additionally, such advertising may get better exposure as viewers are less likely to avoid the commercial the next time they have an opportunity to see it again. Greene (1992) observed that “we in the advertising business are almost preconditioned to think of ‘likability’ as ‘entertainment.’ But this

runs counter to the idea that a merely entertaining commercial can be the most sales effective commercial” (p. 52). Greene's research suggested that liking may have little to do with the traditional concept of entertainment and that viewers seem to respond to the question about liking more in terms of its communications.

Kastenholz and Young (2003) take liking further, saying that “. . . liking and emotional response to advertising are undoubtedly linked” (p. 310). They report results showing a significant, but *negative*, correlation between liking and recall based on their results from Ipsos-ASI testing. After asserting that liking and emotional response are linked and showing that liking does not relate to recall, they conclude that recall does not measure emotion. In addition to the lack of conceptual justification for such a finding (many researchers, as discussed in a later section, have shown emotion and memory are linked), the results differ substantially from earlier findings reported by ASI and from G&R data, which show recall and advertising liking to have a significant, and *positive*, correlation (see Table 3).

RECALL AND COMMERCIAL DIAGNOSTICS

A similar issue is apparent when looking at the relationships between commercial diagnostics and intrusiveness measures. Kastenholz and Young (2003) report that

TABLE 3
Correlations between Liking and Recall

Source	
Ipsos-ASI, as reported by Kastenholz and Young (2003)	-.39**
ASI, Walker and Dubitsky (1994)	.34*
G&R (2004)	.46**

**Significant at 99% CL

*Significance level not reported

Ipsos-ASI recall and attention have a significant positive correlation to “total audio brand mentions,” which in turn is correlated positively to commercials being perceived as ordinary and boring. On the other hand, Ameritest and MB attention measures are *not* correlated to “total audio brand mentions” and correlated negatively to “early category and brand mentions,” which in turn shows negative correlations to diagnostics such as entertaining, interesting, involving, unique, and different—indirectly suggesting recall correlates to diagnostics such as boring, ordinary, while Ameritest and MB attention to diagnostics such as entertaining, interesting, etc. The authors do not provide direct correlations between these diagnostics and recall/other breakthrough measures. The fact that Ameritest and MB attention measures should correlate with these types of diagnostics is not unexpected because their attention measures are actually obtained in terms of “interesting” and “active enjoyment.” However, the Ipsos-ASI correlations reported by Kastenholz and Young (2003) are surprising, as they differ significantly to our own findings, as well as from what Brandt and Walker (2004) of ASI describe: “Recent correlation analysis of recall and diagnostic measures from thousands of

ads test—representing hundreds of different clients and agencies . . . confirms that recall scores are related to both interest in the message *and* involvement with the creative execution.”

Correlation analysis from our own findings show recall to be significantly and positively correlated to a number of positive diagnostics and negatively/not related to unfavorable ones (see Table 4).

RECALL AND EMOTIONAL ADVERTISING

Researchers have directly studied the relationship between recall and different types of advertising. As mentioned earlier, researchers (Krugman, 1977) hypothesized that because recall was a verbal/left-brain activity and television advertising was largely a right-brained function, recall for television advertising would be penalized by the recall measure. Zielske (1982) studied this relationship empirically for television commercials and concluded that, in fact, there should be concern about recall penalizing “feeling” advertisements, although the author acknowledged that the scope of his study was not

TABLE 5
Recall Levels for Different Types of Commercials

AV Synchronization	Highly Rational Commercials (%)	Highly Emotional Commercials (%)
Above average (Base = 426)	12 (319)	16 (117)
Average (Base = 628)	10 (306)	10 (322)
Below average (Base = 527)	8 (99)	8 (428)
Total (Base = 1,591)	11 (724)	10 (867)

Source: G&R (1990): G&R results for all commercials from 1960s and 1970s

adequate for the results to be conclusive. In a later reexamination of Zielske’s findings, du Plessis (1994) argues that the results are mixed rather than supporting the notion that there is a penalization of feeling advertisements with recall.

Historical data and results on recall and emotions from G&R’s television commercial database have never supported Krugman’s and Zielske’s findings. In one of the most extensive studies of its kind, a G&R analysis of 3,202 commercials tested in the 1960s and 1970s shows recall levels for television commercials with highly emotional executions were, in fact, not penalized compared to highly rational commercials when the emotional executions have adequate audio/video synchronization (see Table 5). Talking about what is being shown when it is being shown is very important no matter what kind of commercial it is, and commercials that are better audio-visually synched achieve higher recall levels. In fact, highly emotional commercials perform *even better* when sight/sound synch is above aver-

age. There were, however, significantly larger proportions of rational commercials with above average audio/visual synchronization (44 percent) than were similar emotional commercials (14 percent): the pay off is better, but it occurs less often. It seems that it is easier to achieve audio/visual synch in rational rather than emotional commercials, and results in Table 5 show that there is little overall recall advantage for rational commercials—except to the extent that it is easier to achieve audio/visual synch.

In a similar, more recent G&R analysis of 80 automobile commercials, emotional automotive commercials show significantly *higher* levels of proved recall overall than do rational or mixed emotional-rational commercials, $p < .05$ (see Table 6). Additionally, audio/visual synch seems to influence results for emotional commercials in this sample, but not for the other types (rational, mixed) of commercials.

Similarly, not too long after Zielske’s study, Thorson and Friestad (1989) addressed the issue of recall and emotional

TABLE 4
Correlations between Advertising Diagnostics and Recall

Diagnostic	
Worth remembering	.46*
Imaginative	.25*
Interesting/eye catching	.24*
Thought provoking	.21*
Unrealistic/farfetched	.08
Dull	-.15
Too fast moving	-.26*

Source: G&R (2004) result for all commercials

*Significant at 95% CL

TABLE 6
Recall Levels for Different Types of Commercials

AV Synchronization	Rational Commercials (%)	Mixed Rational-Emotional (%)	Emotional Commercials (%)
Above average (Base = 15)	22 (8)	20 (4)	45 (3)
Average (Base = 43)	23 (8)	25 (14)	29 (21)
Below average (Base = 22)	20 (5)	16 (6)	23 (11)
Total (Base = 80)	23 (21)	22 (24)	28 (35)

Source: G&R results (unpublished) for auto category from 1990s

advertising. Based on a larger sample of television commercials than Zielske's sample, they concluded that the greater the emotional intensity in a television commercial, the more likely recall was to be higher. Thorson (1991) noted also that the intensity of consumers' emotional responses influenced attention, advertising and brand liking, and learning.

Ambler and Burne (1999) also found that affect (emotions) enhances long-term memory of the television commercials and advertising with high affective components have better recall following a single presentation, as well as after 28 days. When pharmacological treatments were used before viewing to block the emotional response on respondents, the level of recall of the affective and cognitive advertisements were at similar levels, unlike for the placebo group whose emotional responses were not blocked, thus confirming that there is an effect of emotions on recall.

Using a physiological-based system to measure the behavioral markers that accompany emotion-based response, Hazlett and Hazlett (1999) reach a similar conclu-

sion and report that commercials that arouse greater emotional response tend to show higher recall for the brands in the commercials a few days after exposure. The physiological measures of facial electromyography (EMG) measure both positive and negative emotions aroused during exposure to test commercials and have been used by other consumer behavior researchers as well (e.g., see Cacioppo et al., 1988). Hazlett and Hazlett (1999) tested pairs of commercials in several categories and for those that showed significant recall differences in the two commercials in the pair, the highest-emotion commercial was better recalled in 100 percent of the cases in men and 80 percent of the cases in women. In an internal study

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by G&R using the same EMG metric, we (G&R, 2003) found correlations between positive emotional activation and recall of $r = .57$ and between positive emotional activation and advertising liking of $r = .32$.

SUMMARY AND CONCLUSIONS

The complex subject of emotions in advertising is one that we are just on the cusp of understanding. Even so, and despite some early criticisms, most past and current research demonstrates that recall and emotion are interconnected. Additionally, there is clear evidence gathered over the years that shows that emotional advertising is not penalized by recall, and that emotional content in well-executed commercials can actually boost recall. Along these lines, recall has significant positive correlations with advertising liking, as well as with a number of favorable advertising diagnostics. Adding to the case are the newer theories of memory and brain functions with recent research in new emotion-based physiological measures, both of which show that commercials that evoke highly emotional response show better recall as well.

The assertions by Kastenholz and Young (2003) that recall misses the emotion in advertising and that liking is a better measure of emotion than recall because emotion and advertising liking are "undoubtedly linked" seem to go too far and miss the mark. Multiple measures are needed to fully understand the various

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facets of advertising effectiveness, and recall is one of these important measures that does well for both types of advertising, be it emotional or rational. **JAR**

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