

Is cognitive processing the right dimension

Bruce Hall looks at emotional engagement rather than cognitive processing as a prerequisite for behavioural change.

SEVERAL RECENT articles and comments in this journal by Heath (1), du Plessis and Hollis (2, 3), Penn (4), and Cramphorn (5) have explored and debated the issue of low vs. high-involvement processing of advertising. I feel I should preface my contribution with a quote from *The Quiet Man* in this, its 50th anniversary year, 'Is this a private fight'?

Without wishing to add more hot air to a discussion that is already sufficiently heated, there are a couple of key points that I believe can move us forward as an industry, towards solving a very real problem, one that prevents us from maximising the potential of advertising. This problem, very simply, is how does advertising work, and how can we prove that it is working – if it is.

I believe that the fundamental obstacle in this debate is the problem of measurement. Advertising testing, especially copy testing and pre-testing, is quite likely the most unsatisfactory area in all of market research. In my many years of experience on both the client and agency side with large advertisers and agencies, advertising testing has been the 'dead zone' of market research, webbed with political controversy, impervious to creative solution, and fraught with error.

It is the problem that gets assigned in advertisers' market-research departments to someone who has established themselves as the 'go-to guy' of the key directors who get to go on photo shoots but don't want to take the blame for a potentially failed advertising program. It is the agency task that gets delegated as far as possible from the director of research or planning – ideally, delegated all the way outside the agency. In both cases, the adroit or the lucky analysts

finesse the issue by scheduling a few focus groups and hoping for the best. The less-adroit and not-so-lucky are landed with the task of explaining and interpreting a report that purports to quantify the efficacy and sales potential of an ineffable and inscrutable creative product, knowing full well that the data are quite likely to be ignored by the key decision-makers if it runs against their judgment.

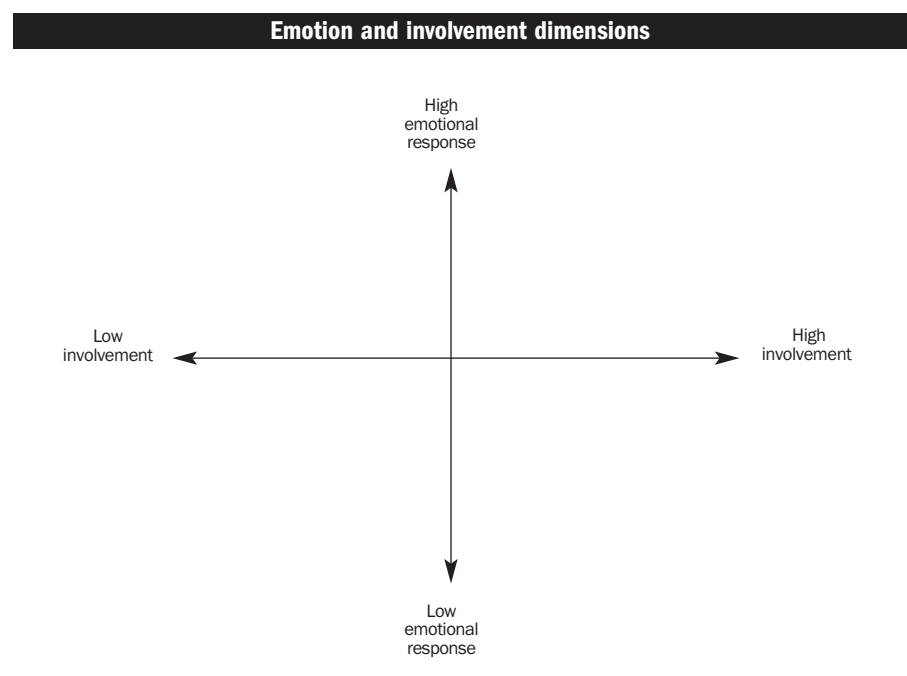
Part of the reason advertising testing has evolved into this Gorgon is that we have not yet developed and perfected the tools to test the key elements of copy correctly. However, the underlying problem is that we still have not reached a consensus on the theoretical framework to drive our approach to testing. In this article I would like to address the theo-

retical problem first, and then outline a point of view on the practical problem of measurement.

Fly low, and high

The debate over low vs high-involvement processing has ebbed and flowed in various forms, but the most recent cycle, as articulated by Heath, is towards greater recognition of the significance of low involvement. Advances in neuroscience have buttressed this development, as Heath notes, and substantial experimental evidence argues for recognition of the critical role of the unconscious in behavior and decision-making (6). A consensus view probably centers on the position articulated by Penn, of a continuum from low to high, depending on the execution.

FIGURE 1



‘The key issue is whether advertising establishes an emotional link, not how it is processed.’

Unfortunately, this low vs high debate has obscured alternative approaches to the question of how consumers process advertising. Whether advertising stimulates low-involvement or high-involvement processing is only one dimension of the problem, and it is likely not the most important one. What is more important, is whether advertising stimulates an emotional response from the consumer. Emotional engagement at some level is a prerequisite for behavioral change – cognitive processing of information is secondary to the underlying emotional and behavioral effects.

In some cases, higher levels of cognitive processing may be correlated with higher-involvement processing, but the fact that the consumer registers higher levels of conscious awareness is an effect, not a cause, of the associated behavioral changes. The behavioral changes flow from the emotional engagement with the brand, not from apparently ‘rational’ conscious engagement. Both the conscious and the unconscious mind can play a key role in decision-making and behaviour, but that does not mean we should be overly concerned with the conscious or unconscious nature of the process. The key issue is whether advertising establishes an emotional link, not how it is processed.

Figure 1 shows how the terms of this debate have confounded progress toward true consensus. The discussion has focused on whether effective advertising must lie to the right on the horizontal axis that describes the ‘Involvement’ dimension. But the effectiveness of an ad really depends on where it lies on the vertical axis, which describes the level and quality of emotional response experienced by the consumer who sees an ad.

Supporting data

In recent experimental work we have conducted on the psychophysiology of advertising (7), we have dimensionalised these axes by testing how consumers respond to television advertising. The psycho-physiological analogue to the horizontal axis ‘Low vs. High Involvement’, is mental workload or cognitive processing. The vertical axis, as mapped in Figure 2, combines both level and quality of emotional response as a single dimension, for purposes of illustration.

Figure 2 shows experimental results for two types of ads. The ads for Lubri-derm, AT&T and MasterCard represent Effie-award winning campaigns that are widely acknowledged to have been highly effective. The ads generically identified as ‘Building Materials’ and ‘Airline’ represent campaigns that have survived on the air, at the lower range of effectiveness.

Clearly the level and quality of emotional response is a crucial differentiator between the best and the worst ads in this sample. Involvement, as measured here, is not nearly as clear. The Airline ad generated a high level of cognitive processing, but was not well liked by consumers. AT&T and MasterCard generated very different levels of cognitive processing, but they were similar in terms of emotional response.

If Low vs High Involvement is closely related to the mental workload the ad generates while the consumer is watching, which we believe to be the case, Figure 2 can help us move the low vs high debate forward. Conscious awareness and recall should flow from higher levels of cognitive processing while the ad is being viewed. Yet higher levels of cognitive processing don’t appear to have a high correlation with the emotional impact of ads.

The MasterCard example raises another key point about the role of conscious awareness and recall. MasterCard’s Priceless campaign has very high public awareness – and would presumably score highly on awareness in tracking studies – even though it appears to be working through emotional rather than cognitive dimensions. Repetition of a subtle theme over a long period of time can presumably achieve the same level of recall as an in-your-face theme over a

short period of time. Why not try for the high level of recall initially and reduce media costs?

Creatives and agency professionals often argue against that approach, based on their own intuition, experience, and judgment. Our experimental work indicates that their concerns may be well-founded. Our deconstruction of the psychophysiology of response suggests that there is a real-time tradeoff between the mental workload an ad imposes on the consumer, and the pleasure he experiences while watching it. It is difficult to move cognitive processing and emotional response in tandem.

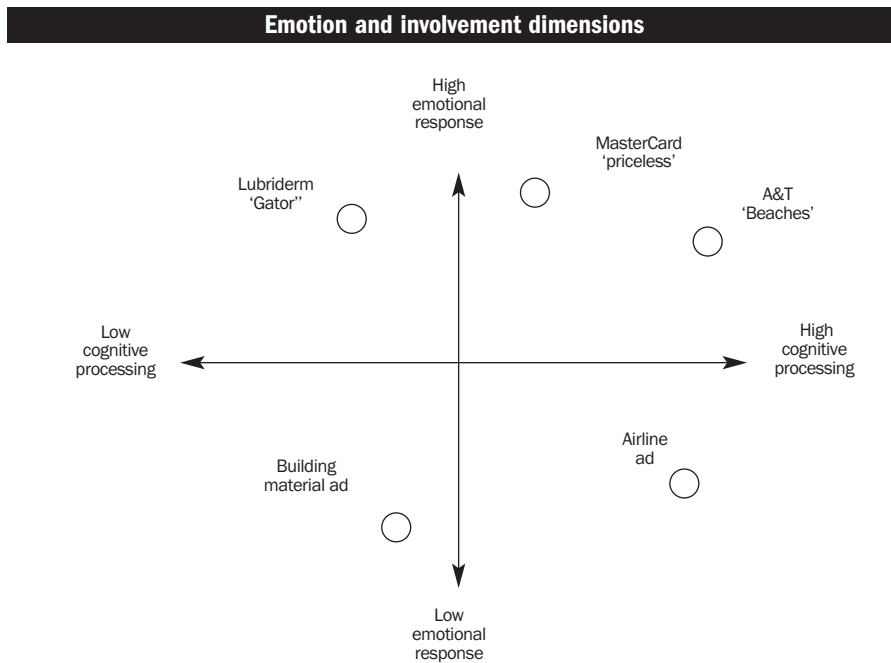
If we think about this from a common-sense perspective, it seems intuitively correct. When we meet someone whom we find highly attractive, we don’t begin by analysing the configuration of physical features that are the basis of that attraction. We are simply smitten, at a deep emotional level. If we step back to analyse why, we are no longer experiencing the emotion. In fact, recent work by Wilson (7) indicates that the act of analysing why we feel what we feel can actually alter and reduce the intensity of the feelings themselves.

Back to the measurement problem

Ultimately, unless we can find new ways to measure the effects of advertising, theoretical discussions will play a marginal role in how advertising is really practiced and the demand for data will never go away. Whether recall is generated through ads that work through Low-Involvement or High-Involvement, if it is easy to measure, shouldn’t we continue to use it as an instrumental variable that helps us understand the underlying emotional effects? If conscious brand attitudes change as a result of viewing an ad, shouldn’t that be a useful proxy for

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FIGURE 1



unconscious attitudes? I believe not, because these measures can be seriously misleading. If they are simply uncorrelated with the true responses, as Figure 2 would suggest, the information they provide is at best irrelevant. But if Wilson's data are correct, consciously expressed brand attitudes may represent false positives for effectiveness and lead us actively to the wrong conclusions.

Cramphorn's suggestions for a research plan that gets to the right answer are reasonable and well-thought out. The idea of using a test vs control design that measures changes with and without advertising exposure is excellent, although, as I have argued previously (Hall JAR (8), the real test lies in changes in response to the product itself, rather than changes in attitudes toward the product, which are potentially subject to cognitive bias. But the ideal program he outlines is unlikely to be followed meticulously. Time, budgets, and business realities usually intervene to cut out key steps, either the qualitative, the quantitative, or some combination of both, which often leads to managers falling back on inadequate qualitative results, or misleading quantitative data. In a world of limited time and resources, we need measurement tools that are not only more accurate, but more efficient.

New approaches to testing

If we are to move forward, it is absolutely critical that we develop tools to measure emotional response pre-cognitively. Some of these tools have in fact been available for some time, but they are gaining new relevance as psychology and neuroscience, which have shown new light on the role of emotions in human behavior, give us the confidence to use them. Others are truly new.

Measuring emotional response pre-cognitively requires 'reading' the emotions physiologically, and generating data to quantify those readings. The human body generates a wide variety of electrical and mechanical indicators of emotional states and these indicators are all accessible to measurement to a greater or lesser degree.

The brain generates electrical impulses that precisely, but weakly, reflect emotional responses. The heart generates much stronger electrical signals than those generated by the brain, signals that also precisely reflect emotions and can be measured using appropriate algorithms. The heart also generates mechanical indicators of emotions, which are equally accessible to measurement.

Even mechanical responses of the face can be used to read emotions. Recent

work by Ekman (9) has focused on the measurement of spontaneous facial expressions and the relationship between what people show on their faces and what they say they feel. Codifying over 3,000 individual muscular movements in the face has enabled them to start correlating specific facial reactions to emotional states.

All of these approaches are seriously under development by various practitioners and academics. It remains to be seen which approach or combination of approaches shows the most promise, but before our industry can reach a true consensus on how we measure this highly intangible, non-cognitive thing we call advertising, we must move beyond cognitively-based measurement tools. ■

1. R.Heath: 'Low-involvement processing: does the LINK test measure it?'. *Admap*, September 2002.
2. E.du Plessis and N.Hollis: 'Low involvement processing: is it HIP enough?'. *Admap*, July/August 2002.
3. N.Hollis and E.du Plessis: 'HIP's and LIP's—a rejoinder'. *Admap*, October 2002.
4. D.Penn: 'Low Involvement to high involvement. How should researchers respond to changing views of how advertising works?'. *Admap*, November 2002.
5. S Cramphorn: 'Pre-testing in the third millennium'. *Admap*, October 2002.
6. T D Wilson: *Strangers to Ourselves: Discovering the Adaptive Unconscious*. Harvard University Press, 2002.
7. B Hall and R Cruickshank: 'AnswerStream Phase 1 Findings'. *Howard, Merrell & Partners/Quantum Intech Working Paper*, 2001.
8. Hall (reference) JAR
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Bruce Hall is a partner at Howard, Merrell & Partners, who specialise in creative development and building client relationships on business strategy. He has experience on both the client and agency side.

bhall@merrellgroup.com