AUDIENCE ACCUMULATION AND THE LINK WITH PRINT ADVERTISING EFFECTIVENESS

Richard Dodson, Telmar Communications Ltd, London

Summary

The percentage of advertising expenditure allocated to print advertising has declined significantly over the last 10 years. It is hypothesised that this is, at least in part, due to the relative inability to measure the effectiveness of print advertising compared to other more immediate marketing options.

The paper reviews the continuation of the work presented by Gordon Pincott of Millward Brown at the Hong Kong Symposium, which has incorporated their data on the accumulation of print advertising exposures over time with new tracking study research. This has resulted in the following conclusions:-

1. Measuring the effectiveness of print advertising, via advertising awareness measures, is possible
2. The time accumulation data presented in Hong Kong appears to be validated by the link to awareness
3. Multiple exposure to the same print advertisement (execution) has a diminishing effect on awareness - in contrast to the established findings for TV. That is, wear-out exists
4. Wear-out happens as early as the 4th exposure.
5. Executions within a campaign need to be noticeably different
6. There may be a threshold level for print advertising below which print is ineffective, or at least unmeasurable.

The paper then concludes by stating that if the print industry is to reverse the decline in its advertising income it must invest more in this type of research and make sure such data are used in day to day print planning so as to

a) Plan print more effectively
b) Communicate the evidence on print effectiveness more widely.

Note: The author is extremely grateful to Millward Brown, and to Gordon Pincott in particular (who is unable to be in San Francisco), for their permission to use their research in this paper.

It is undoubtedly true that the 5 previous Worldwide Readership Symposia have in many respects significantly advanced the science of measuring readership. Indeed, the themes, both in Hong Kong and here in San Francisco, acknowledge this fact and attempt to broaden the debate into the wider area of the use of the research.

I wholeheartedly agree with this trend but would like to be more specific as to the topic on which I believe we all have to focus. A few facts will help me underline my argument.

Since our first symposium in 1981 the % of marketing money which has been allocated to the print medium has fallen significantly as Table 1 illustrates

Table 1: TOTAL UK ADVERTISING EXPENDITURE

	% NEWSPAPERS (CONSUMER MAGS)
1981	43.4
1992	37.6

Source: Advertising Association

I accept that these figures are for UK only but I am led to believe the trend has been the same elsewhere. Why has this happened? We have of course recently been in recession but whilst this has affected the total expenditure I do not believe this has caused the shift from Print.

There is, in my view, one fundamental reason for the change. The 80's and early 90's have seen a dramatic increase in pressure for accountability. Advertisers, in an ever more competitive marketplace, need reassurance that their marketing expenditure is working.

I believe it to be no coincidence that the pressure for accountability has coincided with a shift in marketing spend into those activities that have immediate and therefore more measurable impact.

The print industry has lost out, not because print advertising does not work, but because it is much more difficult to quantify its effect.

We, at this symposium, are the researchers of the print industry. Its future success depends on our ability to research advertising exposure in the press in such a way that we can demonstrate its effectiveness alongside TV, Radio and promotional activities. Readership is a step along this path - but only one step. This paper will try and demonstrate that some progress has been made towards further steps.

Before discussing the specific work, let me first review with you the four main reasons why the effect of print advertising is difficult to measure.

1. Timing

Any criterion by which advertising effect is evaluated will be time based, for example, sales or awareness measures.The media measure used in the evaluation must then also betime based for results to be obtained. This may seem obvious, but for print has been a largely ignored problem. The timing at which exposures to a print schedule occur is unclear, since the readership of a newspaper or magazine may take place over weeks or even months.

2. Number of Exposures

The total number of exposures to a print schedule is also unclear since a reader of a magazine in which an advertisement appears may have either no exposure to the ad or indeed several exposures. Contrast this to television where, using meters, we have a much firmer idea of total exposures.

3. The way the medium works is different

For all kinds of reasons, such as editorial and place of reading, the way in which a print advertisement `works' wil be different to broadcast and other media. Effectiveness measurement techniques used for broadcast may therefore not be appropriate for print.

4. Size of schedule

Many print campaigns have lower budgets than the typical broadcast campaign. Measuring their effect through research is therefore more difficult, particularly if used in conjunction with other media.

For all these four reasons, average issue readership is not a sufficiently good measure to allow the evaluation of print advertising effectiveness.

Two years ago, Gordon Pincott, of Millward Brown, presented the results of some research they had conducted into the first of the above points - Timing. The research, with which Telmar were closely associated, produced estimates of the weekly accumulation of reading occasions of different groups of magazines.

Using this information, Telmar developed a computer system, called TimePlan, which enabled Millward Brown to identify on a week-by-week basis the frequency distribution of exposures to any print schedule.

The reason for TimePlan producing weekly frequency distribution reports was that Millward Brown were interested in testing an hypothesis that wear-out exists for print ads. That is to say that the relative effectiveness of multiple exposures to the same advertisement decreases as the number of exposures increases.

One original reason for tracking studies on TV campaigns was to monitor wear-out. Surprisingly, Millward Brown's conclusions for TV are that whilst TV ads can wear out in their persuasive abilities, they do not wear out in terms of their ability to generate awareness.

The limited data on print available to Millward Brown suggested that this was not true for press advertising. They wanted to test this in more detail.

Once the TimePlan program was available to them, Millward Brown then embarked on Stage II of their project, which was by far the more ambitious. This consisted of a full years tracking study, termed MagTrak, which comprised some 17,500 interviews to establish weekly advertising awareness for 20 brands who, during 1991, were planning to run Press only advertising campaigns.

This size of study, and the use of press only advertisers was designed to give the very best possible chance of being able to monitor effectiveness.

The Results

The typical output from a brand on MagTrak is as shown in graph 1.

See GRAPH 1

The top line shows the % of women saying that they had seen advertising for this brand recently in magazines, with data plotted out on a week by week basis.

The bottom box shows the level of print ratings that supported the brand, also plotted out week by week.

By utilising their modelling programme which has been used so successfully for television tracking studies they were able to measure the effect that the ratings produced on advertising awareness.

The 20 brands on the study were divided into 5 groups on the basis of the results, according to their helpfulness in verifying or challenging the wear out hypothesis.

The 5 groups were as follows:-

1. Brands where there was no advertising because projected plans for the year did not develop as expected (2 brands).

2. Brands where the level of GRPs remained very low and any movements observed were due to marketing activity other than print advertising. There were 3 brands in this group who had respectively 65 GRPs over 11 months, 28 GRPs over 4 months and 153 GRPs over 12 months.

3. A further 2 brands (these being sister brands in the same market sector) proved exceedingly difficult to disentangle. The brands interact with one another and given that they operate in a market with huge advertising spend, it seemed unlikely that theywould help in our understanding of wear-out.

This leaves us with 13 brands which divide into two groups -those which support the idea of wear-out and those which neither support nor refute the idea. None of the 20 brands provides any clear evidence against the hypothesis.

4. The wear-out evidence. 6 brands provided evidence of the existence of wear-out. They were brands where the advertising awareness rose quickly at the beginning of the campaign and fell away rapidly during the course of the campaign. A model which assumes that the ad is constantly efficient throughout the course of the campaign cannot fit both the rise and the fall of advertising awareness. The wear-out model we have used fits the rise and the fall much more closely.

   Brand A is a toiletry brand which had 494 ratings in 1991.These ratings peaked in May when the advertising awareness also peaked. If we assume that each opportunity to see has the same effect and use the model which has this assumption within it, it is impossible to fit the real advertising awareness levels we see with any degree of accuracy.

   The model illustrated in graph 2 neither rises fast enough at the beginning of the campaign nor falls away sufficiently swiftly to make sense of the real data which we have recorded. See GRAPH 2

On the other hand, the wear-out model (graph 3) which applies a different level of efficiency to each opportunity to see is able to fit the shape of the data very much better. This is a very clear example of wear-out in action. See GRAPH 3

To different degrees the other brands exhibit these same characteristics. Graph 4 is another toiletry brand where the constant efficiency model cannot fit the rise in advertising awareness at the beginning of the campaign. See GRAPH 4

The wear-out model (graph 5) fits that rise very much better but at the same time, does not compromise the fit with the fall in ad awareness. See GRAPH 5.

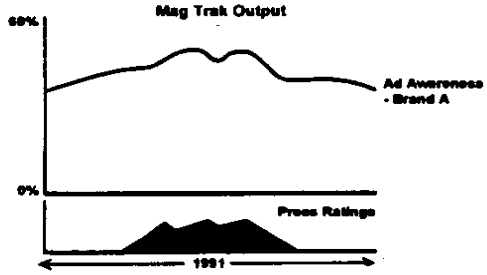
5. The final 7 brands have also allowed us to look at the relationship between exposures and advertising awareness. However, in all these cases, few people in the target audience saw any individual ad enough times for it to begin to wear out.

The beverage brand in graph 6 showed some very clear responses to its advertising campaign and the constant efficiency model fits the movements in the data very well. See GRAPH 6

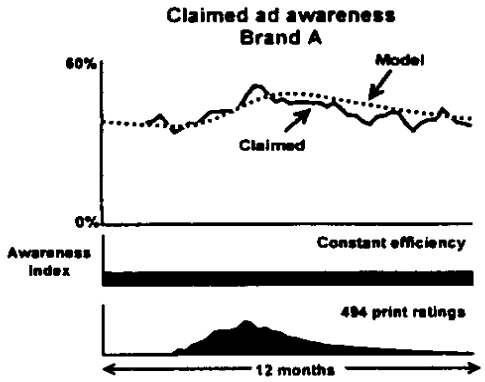
However, the campaign behind this brand during the course of the year consisted of 9 different executions. And it is important to remember that the hypothesis is based on the wear-out of individual executions not campaign wear-out.

Each execution then has had on average slightly less than 100 ratings and if we feed them into the model separately then the fit between the observed data and the wear-out model graph 7 is as good as the fit with the constant model.

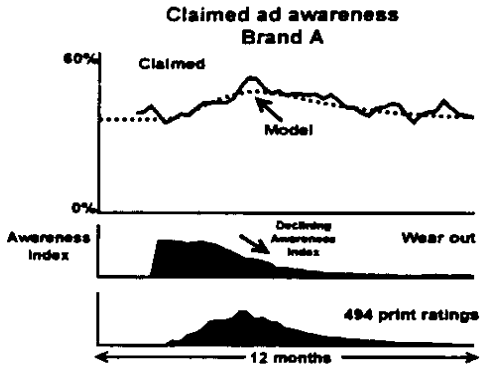
This is simply because in either model the vast majority of the opportunities to see within this specific campaign are accorded an efficiency level of 100%. In other words, the campaign has not reached the wear-out threshold that we are using. See GRAPH 7



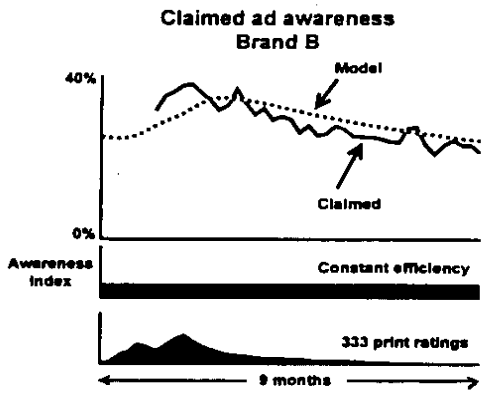
GRAPH 1



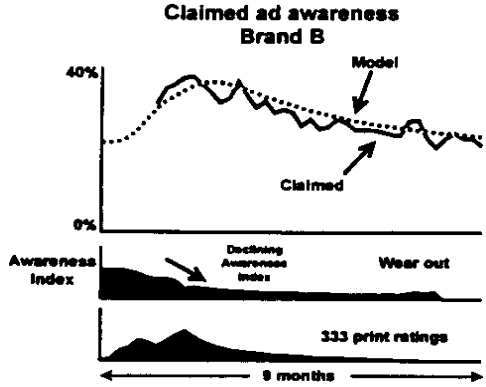
GRAPH 2



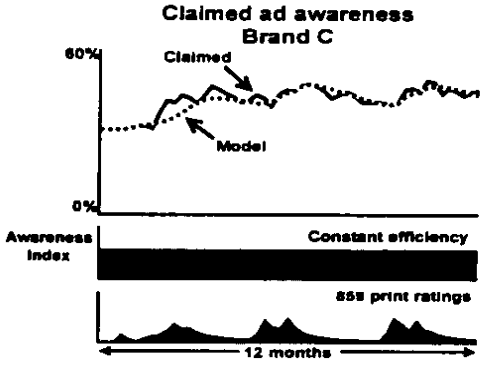
GRAPH 3



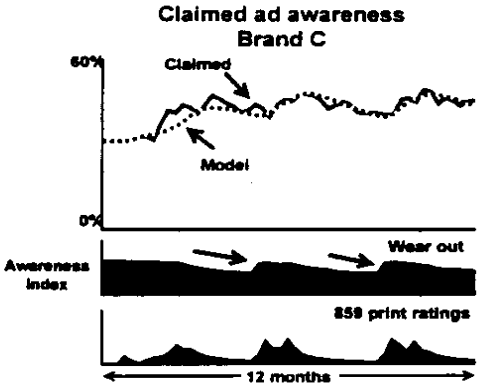
GRAPH 4



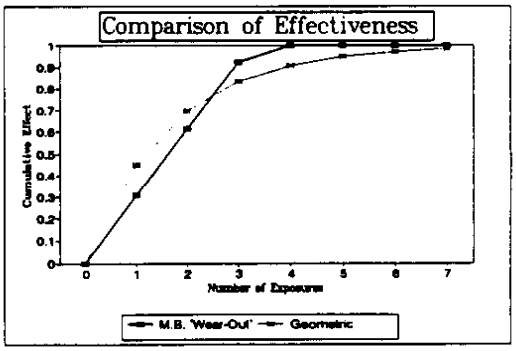
GRAPH 5



GRAPH 6



GRAPH 7



GRAPH 8

Conclusions of the Millward Brown work.

1. Measuring ad awareness generated by print campaigns is possible.

We have seen significant rises and falls in levels of advertising awareness over the course of the campaign, something which it has been notoriously difficult to see on face-to-face tracking studies devoted to looking primarily at television brands. The data has actually shown some very dramatic movements indeed.

2. GRPs over time work

The rises in ad awareness clearly relate to the pattern of ratings over time. This indicates that the way we have been able to spread exposures over time, accurately reflects when real exposures occur.

3. Print ads wear out

The key thrust of this whole study was to find out whether print ads did in fact wear out or not. From the 20 brands we examined, six provided evidence for wear-out and none contradicted the hypothesis. On the available information it would not be prudent to make definitive statements about the nature of wear-out for all brands in all contexts. As a starting point for campaign planning, however, it would be wise to acknowledge the real possibility of an execution wearing out with increased exposures.

4. Wear-out happens after 3 OTS

Millward Brown examined a number of different wear-out hypotheses in terms of how rapidly the ads were wearing out. They did this by applying an efficiency level to each OTS, looking at rapid wear-out and slower wear-out both in terms of straight line declines and also curved declines of efficiency. Of these there was one particular model which seems to fit best. This was a model which gives the first 3 OTS behind an execution an efficiency of around 100% but when the 4th OTS is reached a significant decline occurs where the 4th OTS effectively makes little contribution to advertising awareness.

Millward Brown had expected to see a straight line wear-out of an execution rather than a step function. But in thinking about this finding some logic to it becomes apparent. They were applying our efficiency levels to 'opportunities to see' rather than to exposures and it may take one or two OTS before a real exposure takes place to an ad. It may also take one or two occasions for someone to be exposed to the ad before they register it, stop and absorb it.

However, after the point when someone has had the chance to look at it, then it is subsequently edited out on future reading occasions. The evidence from MagTrak suggests that buying OTS of 4 or more maybe a less efficient use of media monies and indeed it may be wise to optimise the 2-3 OTS level.

Graph 8 illustrates this effectiveness curve, or response function, in conventional terms. Overlaid on it is a geometric function which has commonly been used. Interestingly there is little difference. See GRAPH 8

5. Executions within a campaign need to be noticeably different.

The hypothesis of wear-out was based on the idea of an execution wearing out. However, there is some evidence from MagTrak that if executions within a campaign are very similar there is a danger that each one does not work to its full potential. If there is a risk that someone may read the first ad in a campaign but when they see the second assume that it is basically the same ad they may flick by it for that reason. The campaign for Brand A shown earlier, has 3 different executions but it appears to wear-out as if it had only a single execution. The ads were insufficiently different to warrant being assessed individually by the reader.

6. Threshold levels of ratings

Print schedules are normally evaluated in terms of coverage and frequency. And whilst it is very easy to convert these results into a ratings equivalent, this is rarely done.

It may be one of the consequences of this that occasionally advertisers buy campaigns which have low levels of ratings spread across long periods of time. This research has not shed light nor provided guidelines on threshold levels for print. But it would seem to be a valuable exercise at the time of planning a print campaign to look at ratings levels and to look at how those are distributed across time on a week by week basis particularly in the light of any strategic objectives laid down for the advertising

What does this mean for print?

Obviously there is much more work to do, particularly with regard to identifying whether wear out and effectiveness vary according to creative treatment and the specific print vehicles used in the schedule.

However, in my view, this work is a dramatic step forward in the fight back of print versus other media. The work has shown us

- how print advertising works
- that we should plan each execution separately to maximise effect
- that high frequency for a particular execution is probably wasted
- that tracking studies can measure print effectiveness

This, I believe is the area of print research we should focus on in the future, and to demonstrate Telmars commitment to this concept we have enhanced our TimePlan program to incorporate the Millward Brown findings, thus enabling print schedules to be planned to optimise projected effectiveness, surely our goal if we are to turn round the print advertising expenditure curve.

TOTAL ADVERTISING EXPENDITURE

	% PRINT
1981	43.4
1992	37.6
2001	43.4 ?