



MARKETING COMMUNICATIONS RESEARCH UNIT

REPORT NO. 2

A REVIEW OF LITERATURE ON THE MEASUREMENT
OF ADVERTISING EFFECTIVENESS

Part i: The Pre-Display Assessment
of Advertising

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THE PURPOSE OF THE LITERATURE REVIEW

The publication of a literature review is necessary if an attempt is to be made to understand the state of the art as others see it. The review compiled by the Cranfield MCRU uses published material to illustrate the type of work which is known to have taken place.

The MCRU has collected over a thousand references in its literature search - an activity which is an ongoing one in order to keep up to date with what is happening in the area of advertising and advertising research. Because of the volume of material involved each reference has been allocated a sequential index number, and this number will always be indicated when any reference is given. In the text references will be given in the form of the authors name, the year of publication, and the index number.

e.g. Frost (1970) 21,...

In this form any reference should be easily traced in the appendix giving the full bibliography.

It should be noted that in undertaking the literature search particular attention was given to post 1960 publications. This rather arbitrary cut off point was adopted because it was felt that pre-1960 work which had a special contribution to make would already have passed into books of readings, and the like, and so would be widely available to those interested in the subject.

The initial review of the MCRU - Report Number 2 - covers two main areas of concern:-

Part i "The Pre-Display Assessment of Advertising"

Part ii "Post Display Analysis of Promotional Effectiveness".

The report will cover what are considered to be the main issues in evaluating methods of measuring advertising effectiveness, for this was the guise under which the project was originally set up.

At a later date it is intended that a further review should be published on the material concerned with the processes of how advertising works. This obviously has a strong overlap with any discussion on evaluation of effectiveness, but the area is large enough to warrant its own paper. It should be noted that as other areas become evident as being of particular interest to the sponsor companies, an attempt will be made to review any relevant information which is available.

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SECTION i

General information on pre-testing
techniques - a summary of the main points
of view put forward.

THE FUNCTION OF PRE-TESTING

"Many advertisement copy tests are 'one shot' affairs in which print advertisements or commercials are exposed to respondents and measurements taken within a single session lasting, in most cases, from one-half hour to one hour. Even if the conditions of such studies are ideal and the methods perfect, they still leave one problem of inference: Will an advertisement that does well in a single exposure, immediate measure study, also do relatively well with repeated exposures, over time, in the face of competition?"
Michael Ray (1969) 174.

The issue of whether or not pre-testing techniques can predict promotional performance in the market place, is one which is central to any discussion which is concerned with research intended to aid decision making. Any research which is undertaken as a formality, as a means of endorsing subjective management decisions, is an expensive luxury for any company to indulge in. For present purposes it must be assumed that research which is undertaken is commissioned as a means of avoiding 'bad' decisions. If this is so, it is necessary to be confident that the techniques available are capable of giving significant results; results which can be acted upon. From the literature it is evident that confidence in the techniques available is very varied. At the one extreme it is claimed that it is possible to predict market place behaviour quite accurately, J.M.B. Stocks (1965) 363; at the other it is claimed that the differing results given by the techniques can be explained by statistical error, S. King (1968) 520. Both views are based on analysis of data.

The confidence one has in the ability of pre-testing techniques to predict market behaviour will obviously affect the function one assigns to this kind of research. J. Adams (1970) 144 is very explicit on what he considers to be the function of advertisement testing. He states that it is no substitute for basic work intended to establish consumer motivations in the market place. Basic research needs to be done and should lead to a properly planned creative strategy for the company.

"... the function of advertising testing is to evaluate alternative treatments against this background of knowledge. Thus it is possible to say ad. a is better than ad. b because ..."

The point is that in isolation pre-testing is of little value. This is also emphasised by Shirley Young (1972) 889;

"Copy research is inevitably a second step and plays only the limited role of testing the effectiveness of the strategy's execution."

Kanter (1968) 977 is more specific;

"... It is fair to say that there are many things one can copy test for, but the attempt to measure persuasion by the use of copy-testing is wrong-headed and doomed to failure. The fall from favour of Schwerin type techniques is testimony to this. Expecting too much from copy-testing is probably its single greatest abuse. The value of copy-testing by and large lies in measuring comprehension (whether or not one's advertising strategy or goals are delivered as intended) and very little else".

This implies that before any pre-testing technique can be employed the company has to be very precise about what each advertisement is expected to achieve; a view which is supported by many writers. It is not sufficient for a company to say that its advertisements should be checked to see to what extent they are acceptable to the potential consumer, rather it is necessary to state more specific objectives, e.g. specified copy points must be conveyed; attitude or product preferences should be shifted to a more favourable position; or the predisposition to buy should be increased among non-users of the product.

It is difficult to talk about the objectives of pre-testing without reference to the process by which advertising is thought to work. The relationship between such variables as recall, attitude measures, or knowledge of the product to purchasing behaviour, is again an area in which opinions widely differ. There is much debate about which variables or measures do have a direct relationship with ultimate purchasing behaviour, and the technique advocated by each writer will depend on his point of view. It is intended that a future paper will be devoted to this topic. Suffice it to say at this stage that in the majority of cases, the various measures which will be discussed in this paper assume a relationship between their unit of measurement and ultimate purchase behaviour.

WHAT IS PRE-TESTING MEASURING?

The object for measurement in any of the pre-testing techniques, must be a natural development of the underlying objectives of the research referred to above. As examples, if the objective is to impart additional knowledge to a potential consumer, the measurement employed must be concerned to show just how much of the total knowledge has been assimilated by the respondent; if the objective is to develop a particular attitude in the consumer, the extent of attitude shift will have to be measured to demonstrate to what extent the desired change has occurred.

J. Adams maintains that most forms of advertising testing are concerned with three areas of measurement - learning, attitudes and behaviour.

- " a) Learning - By learning, we normally mean the extent to which the advertisement and/or the product advertised is recalled, and possibly whether, as a result of exposure to the advertisement, the respondent knows some particular fact or facts about the product which he or she did not know before. Measurements of this type normally rely on recall, aided or unaided, of some type.
- b) Attitudes - Attitude measurements range from expressions of interest in particular parts of a commercial, to measures of shifts in factors known to be pertinent to brand choice.

The range of techniques for measuring attitudes varies through mechanical devices such as the psychogalvanometer and the pupil dilation camera, to a series of semantic differentials scales.

5.

- c) Behaviour - Behavioural measures are invariably connected with some measurement of propensity to purchase. They range from the simple application of the direct question through to the ingenious but heavily criticised Schwerin threat of a year's supply of the product chosen in a lottery."

This type of general classification is useful because it forces the company which is new to pre-testing techniques to examine exactly what it is it wishes to achieve, and consequently what alternative techniques are appropriate. Possibly such a classification is also useful as a constant reminder that, for those employing techniques already, the principle of 'horses for courses' must not be forgotten. The stated objectives of many advertisements will be to affect more than one of the above areas. Where this is so, the process by which the advertisement is tested will have to incorporate more than one technique.

In describing the components of an effective selling message, Shirely Young serves as an example of the necessity to employ a combination of techniques. She puts forward four components which ought to be considered when pre-testing an advertisement.

"Attention:Flagging enough of the appropriate target customers.

Communication: Transmitting a clear message about the assets of the product.

Persuasion: Overall - persuading the prospect that this brand is generally more desirable than other alternatives, and Specific - that this brand is better than others on the strategically important benefits.

No negative diagnosis: Not antagonizing the prospect such that he may be turned off by the message after repeated exposure."

It is acknowledged that such a total evaluation of the copy might not be practical in all situations, or that all the components might not be relevant to the particular advertisement. The point is made, however, that the objectives of the advertisement have to be segmented in order to decide on an appropriate technique, or series of techniques. The author takes the view that all four components should be included in any pre-testing technique, but that the emphasis given to each must vary with the particular situation. The concept of total or partial evaluation of an advertisement is elaborated in the paper by M.R.C. Lovell et al. (1967)752. In deciding the appropriateness of particular techniques, they suggest that there is a continuum between holistic and atomistic approaches.

"The Holistic approach. This approach involves the evaluation of the completed advertisement in total and this means appraising it and interpreting the results in the context of the total campaign strategy, e.g. the way in which this advertisement will position the product in terms of other brands, is the advertising correct psychologically in the impact it makes to the market we aim for.

This approach must answer these broad questions. In using this approach one is making the assumption that the details need not be tested if the overall campaign or advertisement is getting the right overall reactions.

The theoretical assumptions underlying this approach stem from Gestalt psychology. Broadly this propounds the point of view that people react to wholes, or tend to create meaningful global impressions of any kind of stimulus material. Thus a person reacting to an advertisement would not be looking at specifics but would be reacting to the total advertisement which is an entity above and beyond the specific elements that go to make it up."

The authors go on to say that this approach may suffer from a certain lack of precision, and subjectivity.

"The atomistic approach. This approach allows evaluations of specific elements of advertisements (e.g. treatments, concepts and combinations of these as indices of advertising effectiveness (e.g. recall, propensity to buy, believability..)). The approach is called atomistic in that it is concerned with elements of an advertisement (concept, treatment) and elements of reaction (recall, believability etc.).

The theoretical assumption behind this approach is that one can treat an advertisement realistically in terms of the sum of a set of relevant elements; and that certain changes can be made to achieve improvements in respect of certain elements of response without necessarily affecting the total balance and its effects."

The authors list the advantages of this approach as being the ability to focus emphasis on specifics, and the fact that the techniques leave little to interpretation and subjective judgment. The disadvantages of the approach stem from the fact that, to a very large extent, one has to pre-suppose which elements of behaviour are important. In addition, little allowance is made for the consumers' frame of reference; the approach is rather inflexible, and it is possible that the creative input could be stultified.

The consumers' frame of reference is a point considered to be of great importance by a number of writers, among them Adriessens (1966) 312.

"When measuring attitudinal changes in pre-testing it is desirable to use an involvement criterion, not in order to confine the test to involved respondents but in order to distinguish between the communication effect on respondents with different degrees of interest in the product advertised. In fact an ad's communication effect depends not only on its quality (theme and presentation) but also on the frame of mind (product involvement) of the reader".

This was stated in a paper reporting some experimental work undertaken to see whether or not the results of pre-testing can be related to the results of post-testing. The work is not conclusive, but an interesting suggestion to emerge is that advertisements are recalled mainly by habitual readers. This would indicate that only a certain section of the public is susceptible to advertising. The majority of authors consider recall to be an important factor.

Summary and Conclusions

The literature reviewed above is considered as general material which outlines the main issues of pre-testing. From it a number of conclusions can be drawn:-

- a) Pre-testing techniques are no alternative to basic motivation research; they are not intended to explain why a consumer will or will not buy the product.
- b) The role of pre-testing is to assess the individual advertisement against the wider advertising objectives laid down by the company. Such objectives should be the result of other types of research.
- c) Pre-testing techniques are considered to be particularly useful in comparing the effectiveness of two or more advertisements.
- d) There is no consensus of opinion about which measurements have the greatest relationship with ultimate purchase behaviour. In talking of ability to remember an advertisement, favourability of attitude towards the product, or expressed intention to buy, each author is propounding a unit which he considers can be measured, and which he maintains has a more or less direct link with future purchase behaviour.

- e) Given that the unit of measurement will be a function of the wider advertising objectives, it is acknowledged that there are a range of appropriate pre-testing techniques, and that care must be taken to ensure that the objective and the technique are compatible.
- f) Whether or not a particular pre-testing technique is appropriate will also depend on which aspect of the advertisement is being evaluated - the whole or a specific part.

SECTION ii

The techniques available for pre-testing
an advertisement - particularly television
commercials.

THE DECISIONS TO BE TAKEN WHEN DECIDING ON A PRE-
TESTING TECHNIQUE

In discussing the various pre-testing techniques which are available, Stephen King, (1968) 520, gives a listing of the ways in which press, television and posters can be tested, and also states how physiological, verbal and behavioural measures can be made. His categories are used as the basis for the following table.

I.I. The Advertising Material Which Can be Submitted
To Research

<u>PRESS</u>	<u>TELEVISION</u>	<u>POSTERS</u>
Rough layouts	Tapes	Rough layout (reduced size)
Finished layouts	Filmed storyboard	Finished layout (reduced size)
Printed Advertis- ements	Videotape	Projected slides (actual size)
	Rough films	Printed posters
	Finished films	

I.II. The Ways in Which Material Can be Presented

<u>PRESS</u>	<u>TELEVISION</u>	<u>POSTERS</u>
Tachistoscope	Cinema	Tachistoscope
Folders	Van or coach	Slides
Dummy magazines	Projectors in the house	Folders
Special issue	Television set in meeting room	In situ.
Normal issue		
Normal issue split run	On the air	

I.III. The Information Which Can be Measured

Physiological

Basal skin response, pulse rate, heart beat
Pupil dilation
Eye Movement (with eye camera)
Perception (with tachistoscope)

Verbal or Written Response

Attention/noting/awareness (advertisement or brand)
Recall of brand name or sales point
Comprehension
Overt belief
Interest
Liking
Attitudes to brand and buying/using
Involvement
Need

Behavioural

Gift choice
Coupon response (from test advertisements)
Buying (e.g. mobile shop test)
Preference testings

By considering the range of alternatives which face any person contemplating the use of a pre-testing exercise, King has demonstrated that the decision to be taken is not a straightforward one. Rather, a number of independent questions have to be answered, and if this is to be done to the best advantage the decision maker must be very sure of what he wants to achieve.

Before drawing up what he considers to be the cycle of advertising and research the author discusses some of the fundamental issues of pre-testing. The questions which he poses are:-

"What sort of material adequately represents the effect of a finished advertisement?

On which people does the advertising work?
Which are the critical terms in which to set the target group?

What will be the effect on the research results of an artificial exposure; of a naturalistic exposure?

Which questions are relevant to advertising effectiveness? How can we be sure they are measuring what they overtly measure?"

Despite the general conclusion that many differences between advertisements in pre-testing scores are no bigger than those which could be **expected** from statistical error, King provides a concise coverage of the main issues in the area, as well as a guideline on what type of research is appropriate in different stages of the advertising management process.

SPECIFIC TECHNIQUES AVAILABLE / ATTITUDE MEASURES

A particularly prominent issue over the past few years has been the contention over the relationship between the various attitude measures and ultimate purchase behaviour; and of the ability of pre-testing techniques to simulate market reaction to a specific advertisement. Joel Axelrod, (1968) 745, undertook a thorough piece of work to study the sensitivity, stability and predictive power of ten techniques which he opted to call 'intermediate criteria'. The ten measures will be listed for they act as definitions for future reference.

"1. The Lottery Measure.

For your cooperation, we would like to give you a chance to win a drawing of \$5.00 worth of (product class). If you are a winner, we will send you the brand you choose. If you are the winner of \$5.00 worth of (product class), what brand do you want?

2. The +5 to -5 Rating Scale

I would like you to rate some brands of (product class) from +5 to -5. The more you think a brand is above average for all (product class) brands, the higher the plus number you should give it, up to +5. The more you think a brand is below average, the bigger the minus number you should give it, all the way down to -5. Remember, you can use every number between +5 and -5.

3. The Predisposition-to-Buy-Sale

Now I would like you to tell me about your interest in purchasing various brands of (product class) by using this card. Tell me which statement describes your feelings about each brand as I name them.

I will definitely buy the brand next time
 I will probably buy the brand in the near future
 I might buy the brand in the future
 I don't know whether or not I will buy the brand
 I will probably not buy the brand
 I will certainly not buy the brand
 I would not use this brand under any circumstance.

4. The Constant Sum Scale

Here's a sheet on which I have listed several brands of (product class). Next to each brand is a pocket. Here are 11 cards. I would like you to put these cards in the pockets next to the brands to indicate how likely it is that you would buy each brand. You can put as many cards as you want in front of any brand, or you can put no cards in front of a brand.

5. Paired Comparisons

I'm going to name some pairs of brands of (product class). I'd like you to tell me which of each pair you would be more likely to purchase.

6. Forced Switching

Please tell me what your regular brand of (product class) is. Now for your cooperation, we would like to give you a chance to win a drawing for \$5.00 worth of (product class). If you're the winner we'll send you the brands you choose. You may select any brand except (regular brand). What brand do you want?

7. Advertising Recall

What brands have you seen or heard advertised for (product class) in the past three months? Are there any others?

8. First and Second Class

If you were to go shopping right now for (product class), what brand do you think you would buy?
If that were not available, what brand would you be most likely to consider as a substitute for the one you wanted?

9. Awareness

Considering (product class), please tell me all the brands you can think of.

10. Buying Game

I am going to give you some cards showing different situations you might run into if you were shopping for (product class). The prices and brands available will vary from card to card. In each case I would like you to tell me which brand you would be most likely to purchase. Here is the first card. What brand would you buy? Here is the second. ..."

Axelrod states the limitations of his research, saying that the study concentrated on verbal behaviour and subsequent purchase behaviour without manipulating the preceding stimulus conditions - e.g. advertisement exposure. In consequence the results apply to the market at a point in time, and not to the effectiveness of a particular stimulus. In addition he was concerned with premium, non-price brands so that further work would be necessary to determine whether or not his findings were applicable to brands where point-of-sale display might be more important than prior attitude. Nevertheless the findings are of interest.

"All measures reveal a high degree of stability. Accurate predictions can be made from one half of the sample to the other half.

Seven measures appear to predict purchase behaviour: The Lottery question, First Choice,

Constant Sum Scale, Paired Comparison, Buying Game, First(mention)Brand Awareness and First(mention)Advertising Recall, in descending order. The balance do not have enough predictive power to be useful."

In considering the relationship between the various measures and subsequent changes in purchase behaviour, the Brand Awareness question was found to be a good predictor. Twenty two percent of those naming a brand first on this question switched to it within three to five weeks. Of those not mentioning the brand first, only four percent made a similar switch. On the issue of repeat purchase behaviour both First (mentioned)Brand Awareness and First (mentioned)Advertising Awareness were good predictors. However, the Constant Sum Scale was superior to either of these. It isolated more clearly those who would repurchase the brand and those who would not repurchase. The study goes on to consider whether or not the behaviour predicted will be consistent or erratic behaviour. From the data the author suggests that where an attitude is found to be favourable, a change in purchase behaviour is more likely to be a permanent change.

Looking at the effect of a particular stimulus, but also purporting to keep other considerations constant, e.g. price, package and display - is the Schwerin technique.

"The measure involved, known as Comparative Preference, was designed to measure the relative effectiveness of television commercials in contributing towards the sale of the brands advertised." Stocks, (1965) 363.

The sample size used in this theatre technique is 300/400. Since respondents are asked which brand they would like to win in a draw both before and after exposure to the commercial, it is maintained that changes in response must be due to the intervening stimulus. It is claimed that the technique measures the effect of the commercial upon the market place rather than upon attitudes or opinions. A number of examples are quoted in which pre-testing results are compared with market place sales. The examples given show that the higher pre-testing results coincide with the higher market place sales.

Despite its fall from favour at the present time the Schwerin technique should not be lightly dismissed, for many of the so called 'new' techniques look very much like a variation on the Schwerin theme. True, the measures employed might differ, but the manner in which the tests are set up, and the assumptions which are made, are strikingly similar. Perhaps it is unfair to quote a single example of what is meant, but the published material on Experimart, Adams (1970) 144, leaves the reader thinking that an updated, and perhaps more scientific Schwerin test has just been described. It is probably true to say that the reactions to Schwerin are firmly split into those for, and those against. Pothergill and Ehrenberg (1965) 17 & 17a, are critics of the approach while Buzzell, Marshall and Murphy (1965) 898 and 898a replied very promptly to the criticisms put forward by the above authors. This collection of articles serve as an illustration of the arguments involved.

Johnson & Peate (1968) 24, in their article on "Holiday Research: The Development and Use of a Model of the Decision Making Process." discuss the use of their own model as a pre-testing theatre technique. The model relies on comparing a series of attitude measures with what the respondent considers to be the ideal attitude measures.

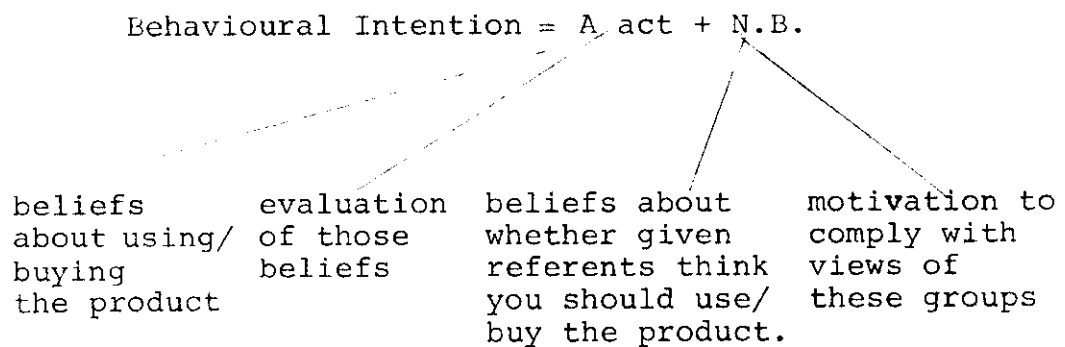
"The bull point of the application of the model which we have just described, rests upon the assumption that a change in attitude will result in a change in behaviour or at least inclination to change in the long term: the extent of such influence being determined by the level of correlation between the attitude and past or potential behaviour. Accepting this assumption, we may say that if we successfully concentrate our creative policy towards changing those attitudes which are important and upon which we are weak, then we shall obtain optimum benefit in terms of behavioural change We have developed a system of simulated attitude change measurement (under theatre conditions) which has proved reproducible on a test, re-test basis and also proved to be able to discriminate highly between creative approaches."

The authors undertook their work with television commercials, but they see a bonus in their contribution because they consider that the technique is equally applicable to other media testing.

This stance on the part of authors - the belief that one can assume a relationship between attitudes and purchase behaviour - is very common. It must be remembered, however, that in the majority of cases no attempt is made in the publications to justify this enormous assumption. Twyman (1972) 976, in his article comparing the St. James and Fishbein models, considers

that the belief is unwarranted.

"In summary, I think in general that we have made a very bad assumption for 75 years, namely that attitudes towards a product or towards objects have some direct link with behaviour. I do not think that this is true and I think that there is now sufficient evidence to say that it is not true. Behavioural intention is a function of two components - your attitude towards performing that specific behaviour, and what you think other people, whose opinions you respect, think you should do. Each of these two elements can be further subdivided to give the following prediction of behavioural intent.



Murphy (1971)68, provides a further example of the use of attitude measures in the pre-testing situation. He is concerned with responses to parts of television commercials; in particular the concern is with developing methods which are capable of discerning which parts of a commercial are working either for, or against, a specific response to the commercial. Two experiments were undertaken.

"In Experiment I, using a forced exposure method, a copy technique was established to measure independent response to television commercials. Then, in Experiment II, the feasibility of relating these independent measures of commercial impact to viewing a particular commercial segment was explored."

The process of response which was assumed to exist by Murphy was - attention; comprehension; significance; differentiation; activation.

"The present research suggests that it is not only possible to measure independent attitudinal responses to commercials with freely motivated viewing, but also that the effect of commercial segments upon resultant attitudes can be studied.

Such information allows us to see which parts of a persuasive communication affect what attitudes and in what way. This can remove a great deal of guess work in deciding why a commercial performed well or poorly on attitude measure."

SOME OTHER CONSIDERATIONS IN USING ATTITUDE MEASURES

Three authors make some general points about pre-testing techniques, using attitude measures to demonstrate them.

Wheatley (1971)⁸, is concerned with the ways in which theatre audiences are selected. To test out his suspicions, he ran a theatre exercise in the following manner.

Before the programme respondents were asked to provide two sets of information;

1. Demographic details, including information on television viewing behaviour.
2. A statement of the brand preferred in each of four specified product groups. The question posed, asked which brand would be preferred if the respondent was the winner of a door prize.

After seeing the programme of a pilot film and two commercials, the respondent was asked question 2 again. Differences in choice were assumed to be the result of the commercial exposure. Finally, the respondent was asked to comment on the programme just seen. Of particular interest was;

- a) whether the respondent had increased his desire for the products advertised, and
- b) what attitudes the respondent held towards the commercials - this was gauged from administering a series of semantic differential scales, e.g. reputable/disreputable;

beautiful/ugly; influential/uninfluential.

The author is of the opinion that there is a high probability that the test audiences in a theatre setting are likely to be unrepresentative samples of the home audiences for which the commercials are intended. Analysing the pre-test results against the demographic data collected, Wheatley was looking for any patterns which existed. The differences which he found were not statistically significant, but some of them were large. Most notable was the relationship between levels of education and recall, with the more highly educated reporting higher recall scores. The paper suggests that those relying on pre-testing should do far more to check out the audiences involved, or state the nature of audience to be recruited e.g. define target market and therefore define audience composition.

Achenbaum, Haley & Gatty (1967) 263, make a comparison of results when pre-testing is conducted in the home and on the air. The on-air results were gained from undertaking an attitude survey before the commercial was run; after the broadcast a second survey was undertaken and the differences in attitudes found were attributed to the commercial exposure. For the in-home test, portable equipment was used and every effort was made to simulate the natural viewing situation. The authors claim;

"We are assuming in almost all testing of TV commercials that one commercial should shift attitudes measurably and that any attitudinal difference detected between control and exposed groups is a useful measure of the effectiveness of this one commercial."

The experiment was set up to see whether the two testing situations yielded the same results in terms of sensitivity and reliability.

"Clearly the in-home exposure yields much more reliable results than the on-air method.

To maintain the same reliability as in-home exposure, on-air broadcasting requires at least four times as many interviews.

We can assert that the in-home method is more reliable but not more sensitive."

There is not a great deal of published work against which to compare this study. The subject appears to be one which few have thoroughly investigated.

Frost (1970) 21, is another author who demonstrates a general technique which could be applied to pre-testing, on attitude measures. Frost makes the point that many of the pre-testing results which are taken at face value, are actually misleading. He advocates the use of multivariate techniques to get more significant results. The examples he quotes show how apparently meaningful attitude shifts are misleading, and also how raw scores not indicating any substantial shift can be significant.

"It is often said in ad-testing circles, that single scales are more useful than factors, in detecting the influence of a commercial upon the brand image of the advertised product. This argument is then supported by cases in which a single scale has shown a substantial shift whilst a factor score has remained relatively inert.

Whilst I don't doubt that such cases exist in plenty, I do question in the strongest possible terms, the inference that the scale is therefore more useful. On the contrary I would suggest that such scales are often useless and downright misleading."

The techniques discussed in this paper are factor analysis, cluster analysis and repertory grid.

It is perhaps unsatisfactory to leave the area of attitude measurement at this point, but the subject matter is vast and can be better considered in its own right. This will be done in a later paper from the MCRU.

THE CLUCAS TECHNIQUE

"In 1967, when the Clucas commercial test first started, clients quickly realised that this was not a new or better method of 'obtaining the data'. The essential difference was that it set out to obtain completely different kinds of data to other techniques in the field. This being so, any reader's interest and attitude to the Clucas service must depend on whether he thinks the kinds of data produced are more or less useful than information available from other sources." Clucas (1971) 473.

The article is brief, but it does describe the technique used, and explains the advantages of it, as the author sees them. Although the test is conducted in a theatre, the selection of films shown are seen on a number of television screens, and not on a large cinema screen. This is an attempt to simulate the home environment to the greatest extent possible.

"After exposure of the films the audience fills in self completed questionnaires. The unique part of the method is the way the audience is enabled - by reprising the test commercial - to give information as to what happened during their first exposure to it - at a time they could not be aware of a specific interest in that particular film.

The data provided is basically of two kinds:

- 1) Data relating to the functioning of the commercial as a whole (Many hundreds of comparable commercial test results are available as comparative normative data).
- 2) Diagnostic data - most of which relates to successes and weaknesses in different parts of the commercial. Thus the results provide not only an overall assessment of the quality of the commercial as a whole, but also explanations of why and how problems may have developed in its making. The importance of

this is, of course, the guidance provided to the creative function in remedying a faulty commercial or improving further a commercial already judged to be performing well."

This particular method must be evaluated on the criteria put forward by the author. An evaluation of it has not been found in any other publication.

THE MORE MECHANICAL PRE-TESTING TECHNIQUES

Not a great deal has been written on the more mechanistic methods of pre-testing an advertisement. What is apparent, however, is the change in fashion which takes place. The techniques pass in to use only to be replaced at some subsequent date, almost as if they were part of an evolution, rather than a method designed for a specific use. Just two papers will be used to illustrate the sort of techniques available.

Grass, Winters and Wallace, (1971) 192 are concerned that insufficient work is done to analyse the component parts of a commercial. They claim that if the test results are deemed to be good, everyone is pleased at the success, but that if the result is at the margin, people have no idea where the communication has failed or why,

"One recent approach to the evaluation of advertising communication is to measure attention and teaching ability separately, under controlled conditions and to relate these two measures in a mathematical model of real world communication effectiveness as follows:

$$\text{Real World Learning} = \text{C.E.} = c(\text{AL})^{\alpha} (\text{TA})^{\beta}$$

where: C.R._i = Communications Effectiveness

c	= constant
AL	= attention
TA	= teaching ability of the advertisement

α and β are exponents that define the specific shape of this product function.

The paper describes an example of the technique in use. Subjects control the strength of a stimulus by the rate at which they press a foot pedal. This measures both attention level and teaching ability of the advertisement. This mechanism, known as CONPAAD, provides the information which is subsequently inserted into the above model. In its defence the authors say:

"In summary, this pre-testing system seems especially valuable because it combines a logical approach to communications theory with quantitative measurements which tell how well an ad does its job.

Certainly the field of advertising is full of theories - and it is also full of numbers; but meaningful combinations of the two are all too few"

Kohan (1968) 795 reports on the galvanic skin response/GRR. He describes the technique as being useful for mapping interest in the commercial build up. In fact the peaks did not coincide with the verbal reports of interest which each respondent gave. This might be of particular use when the commercial being tested bordered on subjects which people are reluctant to talk about, but it has to be remembered that the GRR does not discriminate between favourable and unfavourable interest.

"One interesting sidelight of this study was the comparison of the colour commercial to the black and white commercial. In almost all cases the colour commercial gave an indication of being more interesting than the black and white, and the ratings were constantly at higher points on the scale."

SECTION iii

Pre-Testing techniques for press
advertisements.

PRE-TESTING TECHNIQUES FOR PRESS-ADVERTISEMENTS

"Before an advertisement can do its job it has to be seen, and before a pre-test can evaluate the effects of exposure it must be able to assess the likely level of exposure. The experiment described above suggests that a well designed pre-test can do this. Whether it can do anything else is another matter." Berdy (1971) 73.

The experiment referred to in the above quote was designed to establish how accurately attention levels can be predicted, for the author maintains that if pre-testing methods are unable to gauge this, there is little hope of them gauging the more complex task of predicting ultimate advertising effectiveness. Since the attention value looked for in pre-testing situations should have a high correlation with noting scores collected after a campaign, the author compares his findings against actual noting data. Five different samples of women who had not seen the advertisement were asked to compare four advertisements on one of five criteria:-

- 1) Each woman was asked to rank the advertisements on the criteria of 'interest to stop and read'.
- 2) Each woman was asked to rank the advertisements on the basis 'which of these ads. do you expect most women to stop and read?'
- 3) Each woman was asked to rate the four advertisements on the same projective criteria used in 2).
- 4) A rating question on ease of recognition was asked 'which of these ads would you find easiest to recognise next time you say it?'
- 5) Another ranking question, asking 'which advertise-ment do you like the most?'

The results showed that the third method gave the most accurate reflection of actual **noting** scores.

The paper by Lovell, Johns and Rampley, (1967) 752, is particularly comprehensive on pre-testing methods for press advertisements. The techniques available are split into five categories:-

1. Group discussions and depth interviews.
2. Personal structured interviews - questionnaires/ folder tests/dummy magazine/paper tests.
3. Laboratory techniques - psycho-galvanometer/ tachistoscope/eye observation camera/eye movement camera/blink meter.
4. Measures based on enquiries and sales - split run/ coupon response/buried offer.
5. Measures usually reserved for other media - 'rough' commercials on videotape/press advertisements on television or cinema screens.

The authors make the point that it is more important for press advertisements (than television advertisements) to attract attention because surrounding editorial matter is competing for the individual's attention. Because of this the question of measuring awareness is pursued. In general terms, awareness can be assessed either by questioning people about their actual or probable behaviour, or by observation in a laboratory situation. In this connection, the psycho-galvanometer, the eye observation camera, and the blink meter, are described.

"All these techniques measure emotional arousal, as is claimed for them. The problem with each technique is to make certain that the arousal measured is the relevant one; and an act of faith is required in assuming that seeing an advertisement in a laboratory entails similar reactions to the results of seeing it elsewhere. Given that the direct value of the measures is at best doubtful, there is a strong case for regarding these techniques simply as supplementary to skilled interpretation of qualitative studies."

The tachistoscope and the eye movement camera are discussed, and although they too can be criticised, the authors maintain that they are useful for tracking down areas of weakness in the advertisement - areas where further creative work needs to be undertaken.

Some methods of measuring attitudes and attitude change are considered before the authors turn to some general points.

"Nearly all techniques which claim to measure advertising effectiveness either include recall as one of the most important parameters, or use parameters that are based to some extent on it.

Many advertising tests involve the measurement of both immediate recall and attitudes. If high recall is supposed to predict effectiveness then presumably high recall should be correlated with high attitude change, assuming that the latter is an intention of the campaign. However, there is no evidence that this is so; and there is no evidence of correlation with sales, either."

It is emphasised that it is extremely difficult to know what contribution a single advertisement makes towards sales, and the point is made that pre-testing should not be used for this purpose.

"Pre-testing for the purpose of indicating how much will be achieved by a press advertisement is probably self-deception (coupon response again excepted). But to pre-test in order to improve creative work is another matter. This has to be seen in its proper context; therefore pre-testing is often and should be integrated into a larger programme of advertising agency - advertiser function."

Another critic of recall measures is Young, (1972) 889. She maintains that recall measures are only relevant to explicit copy points, and should never be employed to measure implicit points. In addition, it is contended that recall measures are only partial measures, and that their reliability is unsatisfactory. In support of this dissident view, the work of Clancy & Kveskin (1971) 919, who undertook work concerned with television commercials, is quoted. These authors demonstrated that recall scores are subject to five other external influences - programme liking/education/age/test brand usage/viewing of the entire programme. In the work carried out, these five influences accounted for 56% of the variance in the recall scores. Some of the particular findings given are that older persons have lower scores; that recall is higher after 9.30 p.m.; and that recall is lower when the advertisement is shown at the beginning of a programme.

Wells (1964) 877 adds another dimension to the discussion of recall. He sees the purpose of recall testing methods as being twofold - to say how many people remember the advertisement, and to show what people remember of it. For management purposes the information gained will indicate the strength of memory of the advertisement, and will show whether the intended impressions are the ones actually received. The views which Wells introduces is that people react differently to the same advertisement, and that the emotional reaction is an important one. On the basis of this view an 'Emotional Quotient Scale' was devised. The scale included twelve statements; e.g. this advertisement is very appealing to me/this advertisement makes me feel good/I'm tired of this kind of advertising.

"This scale discriminates between advertisements obviously low in emotional appeal. It also discriminates between advertisements when the difference is not so obvious; and gives a quantitative measure of the differences, large or small."

Since recall techniques are frequently used in pre-testing (quote by Lovell et. al. on page 31), a further point on it is introduced by Stapel, (1971) 191. He demonstrates how recall scores can be correlated with intention to buy. The exercise undertaken had three phases.

1. Each respondent first went through a deck of cue cards listing the various brands advertised to obtain claimed recall.

2. General, open-ended questions were then asked about each claim to establish proved recall, idea communication and persuasiveness of the advertisement.
3. After the questions on recall, respondents were re-exposed to the advertisements in the magazine to obtain recognition data.

The interview ended with asking for demographic data.

"At the end of each interview, a verbal buying intention scale was administered, and respondents claiming they would certainly buy, were given the opportunity to do so by filling out order coupons."

It was found that respondents recalling an advertisement showed, on average, twice as much intention to buy, and also produced twice as many order coupons as respondents not recognising the advertisement, and who probably did not see it.

"Non-users who prove recall of single ads produce on average from 2 to 3 times higher buying intent levels than non-users who do not recognise the ads. Non-recognition has, in a matched sample study, been shown to be virtually identical with non-exposure in this respect.

A considerable number of ads did cause increased buying intent. Immediate advertising results were correlated with the degree of intensity of an ads perception."

DEMOS

One of the more mechanical pre-testing methods which is relatively well documented is DEMOS - Direct Eye Movement Observation System. Fletcher, (1970)108, describes the technique in detail. He carried out experiments to test observed behaviour against a verbal commentary. The agreement levels were high, usually being 94% and above. The lowest level of agreement was 86%. In addition, the author was concerned to see what effect differing conditions had on the results of DEMOS. It was found that there were significant differences between 'filmed' and 'unfilmed' conditions.

"More pages are looked at when subjects are aware that they are being filmed."

In consequence, the more natural the surroundings for this form of pre-testing, the more satisfactory the results.

PERCEPTION OF COLOUR AND BLACK & WHITE ADVERTISEMENTS

Greenhaigh and Smith (1972) 686, are of the opinion that the ability of an advertisement to be perceived and to convey its message, is a function of its ability to capture the audiences attention and interest. An experiment is quoted in which two advertisements are tested for their ability to gain attention and interest. A single advertisement treatment was used, but the one ad. was in colour, the other in black and white. In comparing performance, the authors took into account the 50% premium price for colour, and the fact that for the

same appropriation 33% fewer insertions are bought when colour is used. Hence the results reported are considering the two advertisements on a comparative basis.

Some of the results were as follows:-

- There was no question of either colour or black and white constantly outstripping the other.
- The evidence was that colour advertisements work differently relative to black and white, for different brands in different market situations, possibly using different creative means to achieve advertising tasks.

Results on perception of the advertisement:-

- Colour did not seem to attract any greater conscious attention to individual ads. in the campaign.
- Once looked at, colour did seem to induce more extensive reading of the component parts of each advertisement.
- Colour tended to evoke more comments, both favourable and unfavourable; i.e. the individual colour advertisement invoked more reader involvement than individual black and white ads.
- Nevertheless, the greater involvement invoked by colour is offset by the different number of colour insertions, and consequently did not result in a more favourable attitude to the products advertised, nor to the manufacturer.

On the basis of their work, the authors conclude that the price differential which exists is set at the right level.

PROPOSITION TESTING

In an article written in 1964, Axelrod, 392, surveys the rationale and methods of conducting concept tests for advertisements.

"This approach provides information at the earliest possible stage in the development of advertising campaigns, before the considerable expense of creating finished advertisements."

He claims that in all too many instances concept testing has been carried out through rationales and techniques that do not stand up to critical evaluation. He asserts, however, that conducted properly, concept testing can be made a genuine aid rather than a hindrance to creative efforts. As well as discussing the determination of the right rationale for conducting concept testing, he examines four techniques:

"usually employed: paired comparisons, rank orders, guided usage, and monadic statement."

He asserts that only two of these techniques can be justified as logical means of determining consumer preference. He claims that the 'guided usage test' and the 'monadic statement' test are valid measures. However these are related to product concept testing rather than advertisements, in his analysis. This article is mainly concerned with the ability to quantify results from concept testing and does not fully consider the value of other, perhaps unquantifiable, information.

Kanter, (1970) 142, examines the fallibility of using only one criterion variable in advertising research. Four experiments are reported which include new brand concept testing on one hundred respondents. Kanter claims that the use of simplistic criterion variables, is less satisfactory in measuring subsequent advertising performance, on such things as 'recall', than the use of a variety of criterion variables together.

In a watershed article King, (1965) 358, examines the usefulness of proposition testing. King describes the aims of concept testing and examines the viability of these:

"If we apply these principles (no leading questions, comparing like with like etc.) to proposition testing we can say that it should test something whose effect will be the same as that of its finished form; be useful to creative people in producing, improving, or judging advertisements; be valid from the researcher's point of view; represents real life to the consumer."

King examines these four points and concludes that proposition testing as commonly conducted fails on all counts. Again his concern is mainly with measurement and quantifiable decision making, based on consumer response in such tests.

A subsequent article by Green, (1966) 922, defends the principle of proposition testing mainly on "practical usefulness" grounds. Similarly another article by Harmer-Brown, (1966) 315, examines the pros and cons put forward in the two previous articles. He concludes that definitions are important to the arguments propounded and that cost is the main supporter of concept testing and that it is, in practice, a cheap form of advertisement pre-testing.

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