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3.6   REPLICATING THE EML EXPERIMENT IN INDIA

INTRODUCTION

The history of National Readership Surveys in India goes back to 1970, when the Indian Society of Advertisers and the Advertising Agencies Association of India commissioned a market research company, the Operations Research Group (ORG) to conduct the first National Readership Survey. The readership definition and the techniques for its measurement were similar to those used in the British NRS.

The second National Readership Survey was conducted eight years later in 1978 jointly by ORG and the Indian Market Research Bureau (IMRB) using again the same method as the British NRS. In 1983, five years later, when IMRB was planning to carry out the third NRS, there was some discussion on the appropriateness of using alternative methods for readership measurement. The consensus, however, went in the direction of retaining the Recent Reading technique using mastheads.

With the British NRS changing over to the grouped titles method, researchers in India are debating afresh whether for future National Readership Surveys we should stay with the current NRS technique (which we will refer to in this paper as the masthead method) or change over to the grouped titles/ Extended Media List (EML) method.

IMRB, therefore, decided to conduct an experiment to compare the estimates as well as the appropriateness of the masthead method and the grouped titles method in the Indian context. In addition a third alternative was considered, namely, 'grouped mastheads' (which uses a set of miniature mastheads on a card instead of publication titles in upper and lower case). This paper focusses on the outcome of this experiment.

OBJECTIVES AND EVALUATION CRITERIA

Brian Allt's paper (1983) on the EML experiment in UK and also other literature (Cornish and Meier, 1983) on this subject have dwelt on the advantages of adopting the grouped titles method for measurement of readership in the UK.

These are:

(1) Increasing the number of titles covered from 120 to 200

(2) Reducing order effect and title confusion

(3) Reducing respondent and interviewer fatigue.

Let us examine the relevance of these advantages in the Indian environment. Although the Indian NRS covers 320 publications in 14 different languages, because of regional publications and by using a 'languages read' filter question, the maximum number of mastheads shown to a respondent is 100. The average for even tri-lingual respondents is 60 titles. Therefore, there has not really been any constraint on increasing the number of publications covered in the Indian NRS.

Order effect and title confusion is not a major concern for the Indian researcher because, historically, the Indian NRS has adhered to the recommendation of Dr William Belson in sequencing the titles in the masthead booklet as monthlies, fortnightlies, weeklies and dailies. Also, as there are very few titles with similar sounding names, the problem of title confusion is not as acute as in the UK.

However, readership interviews in some cases take as much as 40 minutes to administer. Any method, therefore, of reducing interviewing time and pro-viding an easy-to-administer technique would be a significant advantage to the Indian researcher. This would also

provide a facility for asking additional questions on sourcing and reading quality.

In India, several researchers are of the view that the mastheads would serve as a better prompt or aid to respondents who are not very well educated or those who are infrequent readers of the publication. It is their belief that in India where literacy levels, reading skills and reading intensities are at a low level, the mastheads are likely to act as a more effective prompt than the titles of publications in upper and lower case.

The specific objectives for this study are:

(1) To examine if Average Issue Readership estimates from the three methods - namely mastheads, EML, grouped mastheads - are comparable. And, if differences exist, to analyse factors responsible for these differences

(2) To establish which of the three methods results in:

(a) a shorter interview
(b) an easier, more manageable interview

(3) To establish whether the EML method or the grouped mastheads method results in greater data stability compared with the masthead method as indicated by:

(a) a reduction in order effects
(b) a reduction in title confusion

(4) To examine whether the Average Issue Readership estimates provided by using the masthead technique is higher than those provided by the grouped titles methods for respondents whose educational levels are relatively lower, or among those who are infrequent readers of the publication.

DESIGN AND METHOD

Essentially this study was a replication of the EML experiment

conducted in UK. The key design features are discussed below:

(1) For the masthead method, a questionnaire identical to the Third Indian National Readership Survey was used, which is similar to the systems followed by the British NRS prior to 1984. The only major difference is that there is a filter question to establish the languages the respondent can read and thereafter the respondent is shown mastheads only for those languages. The mastheads are shown to the respondent, language-wise, monthlies first and dailies last. Within each periodicity group there are two rotation orders, forward and reverse. The questions asked are as follows:

(a) Frequency of reading question
(b) For publications read with frequency greater than none, a question recency of the last reading event. This question was then used to establish Average Issue Readership estimates using the following qualifying period: dailies read yesterday, weeklies in the last seven days, fortnightlies in the last 14 days, and monthlies in the last month.

(2) For the EML method and the grouped mastheads method, after the language filter question, the interview questions were as follows:

Stage 1

The interviewer hands over the pile of cards (arranged in a specific order) and asks the informant to sort them according to whether he or she had read or looked at any of the titles on each card for at least two minutes in the last year. Three 'piles' are allowed for, 'yes', 'no' and 'not sure'. The 'not sure' cards are probed by the interviewer and if still in doubt put on the 'yes' pile and the informant is asked to go through the 'no' pile again to make sure none are missed.

Stage 2a

For each card picked as one containing

any title read or looked at in the last year, informants were asked to name:

(i) those read or looked at 'almost always' (at least three issues out of four)

(ii) those read or looked at 'fairly often' (at least one issue out of four)

(iii) those read or looked at only occasionally in the last year (less than one issue out of four).

Each title on the card not named at one or other of these three questions was further probed.

Stage 2b

Still with the same card informants were asked:

(i) to name any titles read or looked at yesterday

(ii) to name any other titles read or looked at in the last seven days, that is since last ...(day of week)

(iii) by name for each title on the card not yet claimed 'When did you last read or look at a copy of ...?

Stage 2a thus yields frequency of reading claims as follows:

Almost always
Fairly often
Only occasionally

Stage 2a and 2b yield estimates of readership:

On an average day
In an average week
In an average month
In an average three-month period
In the past year.

SAMPLE SIZES AND SAMPLING POINTS

Bombay was chosen as the centre for the experiment because of the following reasons:

(1) Going by region-wise circulation criteria, Bombay is the centre for which, in any NRS, there would be the largest number of publications

(2) Bombay, being a cosmopolitan city, has the largest diversity in reading habits

(3) The key researchers on this project being based in Bombay, we felt it would be easier to monitor the fieldwork and personally observe factors relating to interview time and manageability of interviews.

Three Parliamentary constituencies in Bombay, the South, Central and the North-West, were selected for this study. A total of 63 addresses were selected randomly from the electoral rolls. Around each address thus selected the interviewer contacted every third house, following the Right-Hand-Rule, a systematic method of selection which eliminates interviewer bias. This procedure was repeated till ten successful interviews were carried out around each starting address.

Within the selected household, the names of all the members were listed and the respondent was selected randomly from those members above 15 years of age, using the Kish Procedure.

The sample size for each of the three readership measurement techniques was 600 interviews.

THE FINDINGS

Comparison of gross Average Issue Readership

In this analysis we have examined the gross Average Issue Readership for 30 groups of publications. These groups are not mutually exclusive. In some cases the grouping is by type of publication (viz women's, sports, etc) and in other cases by periodicity within type (viz women's fortnightlies). (Table 1)

TABLE 1
Gross Average Issue Readership

Publication groups	EML	Grouped mastheads	Grouped titles average	Masthead	Percent mastheads to grouped titles average
Base	592	620	606	612	
Percent readers of:					
English:					
Film monthlies	13.0	12.8	12.9	28.4	220.2
All film magazines	20.9	21.2	21.1	48.7	231.4
Sports weeklies	10.1	12.0	11.1	12.2	110.4
Know./Science weeklies	3.1	5.0	4.1	5.5	135.8
Children's magazines	6.3	7.2	6.8	12.3	182.2
Women's fortnightlies	4.0	4.5	4.3	8.7	204.7
Women's magazines	10.6	10.8	10.7	22.1	206.5
Business fortnightlies	3.4	2.7	3.1	4.6	150.8
Gen. interest weeklies	9.5	10.7	10.1	12.7	125.7
Gen. int. fortnightlies	5.5	5.2	5.4	18.0	336.4
Gen. interest monthlies	12.4	11.7	12.1	23.1	191.7
Dailies (exc.business dailies)	43.0	42.9	43.0	39.2	91.3
Evening papers	18.5	19.2	18.9	18.4	97.4
Hindi:					
Film monthlies	4.2	2.6	3.4	7.4	217.6
Film magazines	10.4	12.0	11.2	19.8	176.8
Children's magazines	3.3	2.6	3.0	5.0	169.5
Gen. interest monthlies	4.8	5.4	5.1	13.8	270.6
Gen. interest magazines	7.4	9.6	8.5	19.4	228.2
Dailies	7.0	7.4	7.2	5.0	69.4
Marathi:					
Sports fortnightlies	4.4	3.9	4.2	9.7	233.7
Gen. interest monthlies	5.7	5.2	5.5	11.7	214.7
Gen. interest magazines	16.4	16.2	16.3	24.6	150.9
Dailies	34.2	40.8	37.5	38.3	102.1
Evening papers	1.9	3.8	2.9	3.6	126.3
Gujarati:					
Film weeklies	0.2	0.4	0.3	0.3	100.0
Film magazines	2.0	0.8	1.4	1.6	114.3
Children's magazines	1.1	1.9	1.5	1.9	126.7
Gen. interest weeklies	13.7	10.7	12.2	16.3	133.6
Gen. interest monthlies	2.4	0.5	1.5	2.0	133.3
Dailies	22.7	25.7	24.2	20.1	83.1

It is immediately evident from this analysis that the EML method and grouped mastheads method give very similar estimates with marginal or no differences. However when the average estimates of these two methods are compared with the mastheads method the results differ considerably. The variations are more in the case of magazines than dailies; the masthead method giving considerably higher estimates for magazines.

This prompted us to carry out an aggregate analysis by periodicity groups to see if there was a trend by frequency of publication. The findings of this analysis are indicated in **Table 2**.

The masthead method appears to give considerably higher estimates of Average Issue Readership for monthlies and fortnightlies than for weeklies and dailies. In fact, for dailies the differences between the three methods are not at all substantial.

This analysis immediately raised two questions:

(A) Is the Indian masthead method biased in favour of monthlies? Are the higher readership estimates for monthlies due to the order effect of presenting mastheads?

(B) Is the masthead, shown one at a time, working as a superior prompting aid to the respondent and particularly so for fortnightlies and monthlies which have alonger qualifying period for Average Issue Readership?

Unfortunately, the first question could not be answered through this design since our rotation of mastheads is only within a periodicity group. However, Belson's validation exercise (1981) reported in the New Orleans Readership Symposium seems to suggest that even after showing mastheads for monthlies first there is an under-estimate of readership as compared with the estimate obtained by intensive interviewing!

We however attempted to answer the second question through an indirect method. We therefore restated the question as follows:

If the masthead method is working as a superior prompt to the respondent as compared with the grouped mastheads or the EML method then it may be expected to do so more for less educated respondents (viz non-graduates) as compared with more educated respondents (graduates and above).

Table 3 shows the ratio of gross

TABLE 2
Gross Average Issue Readership by periodicity groups

Publication groups		EML	Grouped mastheads	Grouped titles average	Masthead	Percent mastheads to grouped titles average
Base		592	620	606	612	
Percent readers of:						
Dailies	(24)	127.4	139.8	133.6	125.4	93.9
Weeklies	(48)	63.7	72.2	68.0	87.8	129.1
Fortnightlies	(22)	28.5	26.8	27.7	69.3	250.2
Monthlies	(43)	53.1	49.6	51.4	105.5	205.3

Average Issue Readership of the masthead method as compared with the average of the other two methods (EML and grouped mastheads) for the 'graduates and above' sub-sample as compared with the total sample.

This analysis is restricted to English language publications since the sub-sample of graduates who read publications in other languages is very small.

TABLE 3
Gross Average Issue Readership among graduates and total sample

	Percent mastheads to grouped titles average	
Publication groups	*Graduates and above %*	*Total sample %*
English dailies	102.5	94.3
English weeklies	129.8	128.2
English fortnightlies	238.7	265.6
English monthlies	184.0	200.0

The analysis shows that the ratio of gross Average Issue Readership of masthead method to the grouped titles average is higher for the total sample as compared with the graduates in the case of fortnightlies and monthlies. However the difference is not sufficient to conclude that individual mastheads are a superior aid only for the less educated. They seem to be aiding all respondents, perhaps the less educated a bit more.

Interview length and ease of administration

We particularly wanted to monitor the interview length for the 'readership' questions, on the assumption that if the EML or grouped mastheads method takes less time it may help us add a few questions on sourcing and quality of readership.

Shown below are some results for the three methods based on 25 interviews done with each method using highly trained interviewers in a 'controlled' environment. These measured timings are only for the specific 'readership' questions of the interview and do not include time for obtaining demographic data, respondent selection and other questions on sourcing etc.

TABLE 4
Time taken for interview

	In minutes range	*Average time*
EML	10 - 23	15.0
Grouped mastheads	10 - 20	14.8
Masthead	10 - 16	11.0

We tried to analyse what the contributory factors were for the EML and grouped mastheads method taking more time, even in a controlled environment with highly trained interviewers. Our observations as well as those of the field supervisors in accompanied calls were as follows:

(a) Respondents found it a little difficult to comprehend the process of sorting the grouped title cards and had to be explained this two or three times over

(b) The process of going through the 'No' cards again was irritating to the respondent and took extra time

(c) In general, respondents tended to be a little confused by the different stimuli on the card and took more time to give answers as compared with those who were shown individual masthead cards.

From the point of ease of interviewing, interviewers found all the three methods equally manageable in the case of educated-upper income respondents. However with the EML and grouped mastheads method they faced some logistical

problems which are perhaps unique to
the Indian environment. In many lower
and middle income households there is
very little furniture. The interview
is often done with the respondent
sitting on a bed with the interviewer
sitting on a stool or chair (which in
some cases was borrowed from
neighbours). The absence of a table
for neatly sorting and piling the cards
makes the whole interview process
cumbersome. In most such situations
interviewers and supervisors found
going through the masthead booklet more
convenient.

Data stability

In this analysis we have tried to
examine the extent to which the EML
method or grouped mastheads method has
greater data stability from the point
of view of order effects and reduced
title confusion.

Order effects

Studying all types of order effects as
done in the EML experiment in the UK is
not feasible in our context mainly
because of the 'languages read' filter
which results in a variable number of
cards and mastheads being shown to each
respondent. Hence a title may be shown
relatively 'early' or 'late' depending
upon the specific languages the
respondent reads.

We have restricted the analysis of
order effects to 'position on the card'
effects in the case of EML and grouped
mastheads methods. In the case of the
regular mastheads method the analysis
of order effects has been done for
selected publications comparing the
forward order with the reverse order
(converted in this case to 'early'/
'late').

The two order effects are not really
comparable but give an indication of
the magnitude of these effects in each
case.

(i) EML and grouped mastheads —
position on the card effects.

The data from both the experiments have
been pooled to increase the sample size
since both these methods give
comparable Average Issue Readerships.

There were a total of 29 grouped title
cards used in each experiment. Of
these cards, we analysed order effects
for 10 cards with five or more titles
on the card. Two positions have been
compared: 'best' with the title being
on top of the card and 'other' with the
title not being on top of the card.
The results are shown in **Table 5**.

In four of these nine cases there is
very low variation between 'best' and
'other' positions. In the other five

TABLE 5
Position on card effects

	Average Issue Readership EML and grouped masthead method combined		
	Position:		
			Best
			——%
Publications	*'Best'*	*'Other'*	*Other*
	%	%	%
Cine Blitz (English)	8.2	11.6	70.7
Career and Competition Times (English)	2.3	2.2	104.5
Amar Chitra Katha (English)	2.7	3.9	69.2
Blitz (English)	4.3	4.3	100.0
Celebrity (English)	1.6	1.7	94.1
Filmi Duniya (Hindi)	6.2	6.1	101.6
Dharmayug (Hindi)	10.0	14.2	70.4
Chandoba (Marathi)	10.7	7.2	148.6
The Daily (English)	17.5	21.6	81.0

*Note: Base taken for each publication
is total readers of any publication in
that language.*

cases the ratio ranges from 70% to 148% but with no pattern *per se*. The order effects are considerably higher than those observed in the UK experiment; however, some variations could be expected since the sub-samples with the two positions are not perfectly matched.

(ii) Masthead method — 'early' vis-a-vis 'late' position

As mentioned earlier, due to the languages-read filter, the number of mastheads shown varies from respondent to respondent. Hence we have not attempted an analysis by groups of publications. We have identified a total of 13 magazines for this analysis, by selecting those which tend to appear in the beginning of the list or end of the list in each periodicity group. The 'early'/'late' analysis for Average Issue Readership is shown in Table 6.

There is a distinct bias in the masthead method in favour of the 'early' order. The magnitude varies from 94.9% (almost 100%) to 280%. There is no pattern however by periodicity. In the case of 'sports' publication though, due to similarity of titles, this would be a combination of 'order' effects and 'title' confusion effects.

While the 'order' effects of the two types of experimental studies are not really comparable one could say though that in the masthead method they are of a high order of magnitude and somewhat unidirectional - high Average Issue Readership in the 'early' position.

Title confusion

As stated earlier this is not much of a problem in the Indian context due to the relatively fewer publications with similar titles. **Table 7** presents an analysis comparing the Average Issue Readership for one pair of sports publications.

There were two other possible pairs, both pertaining to Hindi publications

TABLE 6
Order effects: early vs late positions

	Average Issue Readership masthead method		
Monthlies	*Early* %	*Late* %	*Early* —% *Late*
Cine Blitz (English)	17.9	13.2	135.6
Movie (English)	15.1	7.4	204.0
Showtime (English)	10.8	8.3	130.1
Stardust (English)	28.1	22.3	126.0
Kirloskar (Marathi)	10.8	8.1	133.3
Stree (Marathi)	10.8	8.1	133.3
Fortnightlies			
Filmfare (English)	20.1	16.5	121.8
Star & Style (English)	22.3	13.2	168.9
Weeklies			
Screen (English)	9.4	9.9	94.9
Sportstar (English)	11.5	4.1	280.5
Sportsweek (English)	15.1	5.8	260.3
Sportsworld (English)	10.1	6.6	153.0
Eve's Weekly (English)	17.2	11.6	148.3

Note: Base in each case is those who read 'any' publication in that language

whose reader base in the sample was too low to enable reliable analysis.

While in the EML experiment in the UK the forward/reverse index was of a much lower order than the NRS masthead method, here the findings seem to indicate a different pattern. The grouped masthead method seems to perform better than EML, having little variation between the orders. The masthead method too does not perform very badly if we treat the forward index/reverse index as an evaluation criterion.

TABLE 7
Title confusion

Masthead method	Forward %	Reverse %	Forward ───% Reverse %
(a) Sportstar	11.5	4.1	
(b) Sportsweek	15.1	5.8	
a/b %	76	71	107
Grouped mastheads			
(a) Sportstar	6.9	7.6	
(b) Sportsweek	14.5	15.9	
a/b %	48	48	100
EML			
(a) Sportstar	5.6	3.7	
(b) Sportsweek	12.7	10.6	
a/b %	44	35	126

Note: Base in each case is readers of any English publication.

This appears to substantiate the earlier observation by interviewers that when shown mastheads respondents felt more certain when claiming readership of a particular publication.

CONCLUSION

Based on the findings of the experimental study we observe that:

(1) From the point of view of interview time and the ease in conducting the interview. the EML or grouped mastheads method do not appear to have any significant benefits in the Indian environment. In the lower income households, where there is little furniture, the card sorting technique, in fact, suffers from severe operational problems.

(2) The masthead method has a higher degree of order effects, with a bias in favour of mastheads which are shown early in the booklet. Perhaps some elements of the EML method may be incorporated in the mastheads method to reduce title confusion. Alternatively, one could consider the use of more than two orders so as to balance the order effects.

(3) This experiment raises again the issue of sequencing of publication groups in the masthead booklet. There is clearly a need for much greater experimental work to validate the readership estimates for magazines either through large sample first reading events 'yesterday' method or through intensive interviewing. This will be particularly important in India because changeover of systems could result in much lower estimates of the readership of fortnightlies and monthlies. This would be unacceptable to the advertising and publishing industry were this changeover to be made without rigorous validation.

While it is our recommendation that we continue with the current masthead method in India, we look forward to evaluating the results of similar experiments in other developing countries of the world.

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Specimen card used in masthead method

Reader's Digest

**IN THE LAST 6 MONTHS I HAVE READ OR LOOKED AT THIS
NUMBER OF SEPARATE ISSUES**

| 6 | 5 | 4 | 3 | 2 | 1 | NONE |

Specimen card used in EML

Specimen card used in
grouped mastheads

Celebrity

Bombay

Debonair

Gentleman

Imprint

Mirror

Reader's Digest

Celebrity
Bombay
debonair
GENTLEMAN
imprint
MIRROR
Reader's Digest