

MediaSearch

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MEASURING READERSHIP AMONG CHILDREN - SOME FRESH INSIGHTS

SUMMARY

The findings of the first syndicated study of children's media habits in India were published in May 1990 by Mediasearch, the specialist media research division of MARG. The study, titled Children's Media Survey (CMS), covered 8-15 year olds. A total of 5,523 personal interviews was conducted across 16 cities. The survey covered both children's and adult titles.

The CMS data allowed us to address three important questions :

- i. Does the stability of AIR data vary across different age sub-groups within the 8-15 age group? This has implications for the definition of the universe for the next CMS.
- ii. In reaching children, are there any behavioural measures (number of issue pick-ups, time spent, source of copy, etc.) which, when used in conjunction with AIR data, could help the media planner determine the 'worth' of an OTS in a particular title vis-a-vis the OTS in another?
- iii. Can non-media data on children (relating to pocket money, extra-curricular activities, products purchased etc.) open the door to more focussed targetting and therefore to more efficient media planning?

BACKGROUND

Until recently, syndicated readership research in India was confined to adults. The past three National Readership Surveys (NRS) and NRS IV - whose findings are due to be published by April 1991 - have as their universe, males and females aged 15 and above. The other large scale syndicated media surveys in India have also been restricted to adults.

The lack of data on the media exposure of Indian children, together with the increasing realization of the importance of children as decision-makers and influencers in a number of product categories, prompted Mediasearch (the specialist media research division of MARG) to launch the Children's Media Survey (CMS). The CMS findings were published in May 1990.

The CMS covered 8-15 year olds in middle, upper-middle and upper income group households. A total of 5,523 personal interviews were conducted in 16 cities - covering a cross-section of 100,000+ population Indian cities.

The CMS used the recent reading model for measuring Average Issue Readership (AIR). However, the exact method was selected on the basis of an experiment - which preceded the CMS - to test three different methods of measuring AIR. The results of this experiment were presented at the Barcelona symposium in 1988 in the paper titled 'Testing alternative methods for measuring readership among children'.

The CMS measured children's exposure to various media. In addition, the CMS also gathered data on attitude to individual media vehicles in terms of titles/programmes most liked. Of course, it also provided behavioural measurements of exposure to various media.

With regard to press, the CMS covered reading quality measures of average time spent, number of issue pick-ups and source of copy (in addition to the good old AIR), at individual title level.

In addition to behavioural and attitudinal data relating to children's interaction with individual titles, the CMS also gathered a lot of non-media data such as :

- a) Children's attitude to advertising in general, and their preference for specific types of advertisements (cartoon ads, ads featuring children, etc.)
- b) Role played by children in brand choice for pre-specified product categories
- c) Child-specific behavioural data on particular activities i.e. frequency of going to picnic/school excursions, incidence and frequency of going on holidays with the family, destinations for such holidays and the incidence, periodicity and amount of pocket money spent, as well as items on which this pocket money is spent, etc.
- d) Profile of children on the usual demographic variables (such as sex, age, monthly household income, mother tongue) as well as other variables which are of special relevance for children such as, occupation and education of each of the parents, type of school, medium of instruction and class studying at present

Issue I : Relationship between the age of the child respondent and the stability of AIR

We felt it was important to examine the stability of AIR across different age sub-groups within the 8-15 age spectrum. The primary purpose behind this exercise was to decide whether the youngest sub-group covered is too young to be administered the AIR questions. If the answer was in the affirmative, we would have to move the lower cut-off point for the next CMS upwards to, say 9 or 10 year olds. On the other hand, if the answer was in the negative, we would consider lowering the age cut-off to include 6 or 7 year olds, a move that would be welcomed by media planners.

We, therefore, examined the stability of AIR in the lowest age band of 8-9 year olds with that in the highest age band of 14-15 year olds. Our hypothesis was that the stability of AIR in 8-9 age band is no different from that among the 14-15 year olds.

Measurement of stability

Ideally, of course, one could have used the Belson method of following up the normal AIR interview with a second more intensive interview carried out by an experienced researcher. However, this method is obviously very expensive for large sample sizes. We therefore employed another, admittedly less robust method, which uses the data gathered within the CMS.

The CMS collected information on both the frequency of reading as well as AIR for each of the titles, making it possible to use the frequency of reading data to arrive at the theoretical AIR. We used the difference between the theoretical AIR and actual AIR as a measure of stability.

We have only looked at those titles which get read by both 8-9 year olds and 14-15 year olds. In all, there were 79 such titles. However, both number of child respondents and number of publications filtered in varies across the two age bands. There would be as many terms as the total number of child publication observations. Hence total of all the absolute differences between actual and theoretical AIR has been divided by the total number of child publication combinations to arrive at the mean absolute difference.

The table below shows the mean absolute difference between the actual AIR and the theoretical AIR. It also gives the mean of sum of squares of differences between the actual AIR and the theoretical AIR.

Table 1

	<u>8-9 year olds</u>	<u>14-15 year old</u>
No. of titles	79	79
No. of child-publication observations	579	1272
Mean absolute difference between actual AIR and estimated AIR	2.79 0.730	3.65 0.926
Mean SSD (sum of square of differences between actual AIR and theoretical AIR)	108.14 0.934	390.49 1.799

As can be seen, both the mean absolute difference and the mean sum of square of differences are in fact lower among 8-9 year olds than among 14-15 year olds. One can therefore infer that AIR data for 8-9 year olds is no less stable than that for 14-15 year olds. Hence, it would be worth examining the possibility of extending the age coverage for the next CMS. Towards this end, Mediasearch plans to conduct an experiment on AIR among 6-7 year olds.

Issue II: Measures that reflect a child's differential involvement with children's titles vis-a-vis adult titles

As is well known, in the recent reading model, an average issue reader of a publication is defined as anyone who has read or looked at an issue of that publication within its reference period (yesterday for dailies, the last one week for weeklies, etc.) Thus, a child who, say, regularly reads only the comic strip of a newspaper and who also regularly reads a children's magazine almost cover-to-cover gets counted as an average issue reader of both the newspaper and the children's magazine. In other words, in this case the fact that the intensity of 'consumption' of the children's magazine by the child is much higher than that of the newspaper does not get reflected in the AIR data. Since the CMS has also gathered information on other behavioural measures of a child's interaction with individual titles (time spent, number of issue pick-ups and source of copy) as well as the attitude of the child towards individual titles (in terms of 'the three publications liked best'), we have attempted to identify the measures that best discriminate a child's involvement with children's titles as against adult titles (which we know from other studies - as well as intuitively feel - command different levels of involvement).

Since there are no specialist children's newspapers, we have excluded all newspapers for the purpose of this exercise. Thus we have compared various measures of children's interaction with children's magazines vis-a-vis those for their interaction with adult magazines.

All the measures on which data has been gathered in the CMS have been used in this paper in exactly the same form as they were gathered, with the exception of time spent on a title and number of issue pick-ups. As the number of pages in a typical children's title is less than that in a typical adult title, we have looked at average time spent per page (i.e. average time spent on a title divided by average number of pages in that title) as a measure, rather than the average time spent for the title as a whole. The fact that the size of a page differs across magazines also posed a problem in the calculation of average time spent per page. We therefore converted the number of pages of a title into the equivalent number of 'standard' pages by using the magazine page size of 8 1/4" x 10 3/4" (the most common size for magazines in India) as the standard page size. Thus for any respondent the time spent on a title has been divided by the number of standard-size pages in that title to arrive at the time spent per (standard) page. In the same way and, exactly for the same reasons, we have looked at number of issue pick-ups per page.

As we can see from the table below, 'liking' does reflect children's involvement with publications better than AIR since 'liking', as compared to AIR, shows more marked differences between children's titles and adult titles.

Table 2

	No of titles	A	I	R	No of mentions among three titles liked most	
		('000s)		Index	Minutes	Index
Children's magazines	27	60.6		157	46.6	269
Adult magazines	45	38.7		100	17.3	100

The 'liking' score which media planners also accept as a relevant measure for selecting individual vehicles - since it adds to the 'worth' of the advertising opportunity offered by the title - manifests itself in two aspects of the process of 'consumption' of titles - time spent per page and number of issue pick-ups per page.

Table 3

	No. of titles	No. of mentions among three titles liked most		Source of copy		Time spent per page		No. of issue pick-ups per page	
		No.	Index	% Bought	Index	Minutes	Index	No.	Index
Children's magazines	27	46.6	263	33.1	93	1.195	224	0.913	130
Adult Magazines	45	17.3	100	37.3	100	0.528	100	0.422	100

The next logical step is now to develop one composite measure which incorporates AIR, publications liked, average time spent per page and number of issue pick-ups per page. This new composite measure would then be a more appropriate one (than AIR alone) for evaluating the relative worth of advertising opportunities offered by individual titles. We propose to undertake this as a follow-up to the CMS.

Issue III : Going beyond media exposure measures for more focussed media planning

The fact that the CMS collected some non-media data has enabled media planners to go beyond the standard media planning process. We present two case studies on how this has facilitated the drawing up of more meaningful media plans.

Case Study I : Media plan for a brand of chocolates aimed at children

The target group as defined by the Client was :

Age : 8-15 years
Monthly household income : Rs.1500 +
Location : Bombay

The media planner used CMS data to obtain the readership levels for individual titles, computed the cost effectiveness for each of the titles and then selected the most cost effective titles. For a budget of Rs.500,000 the media plan thus arrived at has been presented in the table overleaf.

Table 4Chocolates Media Plan I : Standard Media Plan

Publication Name	Language	Periodicity	Cost of 1 insertion	No of insertions	Total cost
Kishore	Marathi	Monthly	1000	4	4000
Chandoba	Marathi	Monthly	3700	4	14800
Tinkle	English	Fortnightly	5500	6	33000
Chandamama	English	Monthly	3300	4	13200
Amar Chitra Katha	English	Monthly	5500	4	22000
Indrajal Comics	English	Weekly	6600	8	52800
Lokprabha	Marathi	Weekly	4000	8	32000
Mayapuri	Hindi	Weekly	5000	8	40000
Target	English	Monthly	4000	4	16000
Champak	Hindi	Fortnightly	5750	6	34500
Jee	Marathi	Fortnightly	6000	6	36000
Movie	English	Monthly	9000	5	45000
Stardust	English	Monthly	23500	4	94000
Filmfare	English	Monthly	15000	4	60000

Subsequently, the media planner decided to use some of the other data that was available through the CMS. Since the chocolate was of low unit value and positioned specifically for children, the media planner decided to use the pocket money data provided by the CMS. The target group was then defined by the media planner as follows :

Age	:	8-15 years
Amount of pocket money	:	More than Rs.50 per month, with chocolates as an item on which pocket money is normally spent.
Location	:	Bombay

The media plan was arrived at by using the same process but with this new target group definition. The new plan has been outlined in the table overleaf :

Table 5

Chocolates Media Plan II : Using non-media behavioural variables

Publication Name	Language	Periodicity	Cost of 1 insertion	No of insertions	Total cost
Kishore	Marathi	Monthly	1000	4	4000
Chandoba	Marathi	Monthly	3700	4	14800
Chandamama	English	Monthly	3300	4	13200
Tinkle	English	Fortnightly	5500	6	33000
Champak	Marathi	Fortnightly	5750	6	34500
Chanderi	Marathi	Fortnightly	5000	6	30000
Lokprabha	Marathi	Weekly	4000	8	32000
Jee	Marathi	Fortnightly	6000	6	36000
Mayapuri	Hindi	Weekly	5000	8	40000
Amar Chitra Katha	English	Monthly	5500	4	22000
Indrajal Comics	English	Weekly	6600	8	52800
Indrajal Comics	Marathi	Weekly	6600	8	52800
Sunday Sakal	Marathi	Weekly	6750	8	54000
Navakal	Marathi	Daily	14250	7	85500

If we say that the second definition is more relevant, the best way to estimate the extent of improvement offered by the new target definition would be to compare the reach and OTS achieved by the two media plans within the new definition of the target segment. The table below presents this comparison between the two media plans. As can be seen, the media plan using behavioural variables gives 2% higher reach and 40 % higher gross OTS than the standard media plan, at more or less the same cost.

Table 6

Chocolates : Comparative reach and OTS of alternate media plans

	Standard media plan	Media plan using non-media behavioural variables
Reach ('000s)	250	256 (102%)
Gross OTS ('000s)	1456	2041 (140%)
Total cost (Rs.)	497,500	504,600 (101%)
Cost per thousand reach (Rs.)	1990	1971 (99%)
Cost per thousand OTS (Rs.)	342	247 (72%)

*Case Study II : Media plan for an amusement
(Disneyland - like) park*

The initial target group definition used by the advertising agency was :

Age : 8-15 year olds
 Monthly Household Income : Rs.2500 +
 Location : Bombay

In the light of the data available in the CMS, this target group was revised to :

Age : 8-15 year olds
 Outdoor activity : Who go on school picnics and on holidays with family, within the city
 Location : Bombay

The two media plans are given below in Tables 7 and 8.

Table 7

Amusement park Media Plan I : Standard Media Plan

Publication Name	Language	Periodicity	Cost of 1 insertion	No of insertions	Total cost
Tinkle	English	Fortnightly	5500	6	33000
Amar Chitra Katha	English	Monthly	5500	4	22000
Chandamama	English	Monthly	3300	4	13200
Chandoba	Marathi	Monthly	3700	4	14800
Indrajal Comics	English	Weekly	6600	8	52800
Lokprabha	Marathi	Weekly	4000	8	32000
Star & Style	English	Fortnightly	4000	8	24000

Table 8

Amusement park Media Plan II : Media plan using behavioural variables

Publication Name	Language	Periodicity	Cost of 1 insertion	No of insertions	Total cost
Chandoba	Marathi	Monthly	3700	4	14800
Kishore	Marathi	Monthly	1000	4	4000
Lokprabha	Marathi	Weekly	4000	8	32000
Champak	Marathi	Fortnightly	5750	6	34500
Chandamama	English	Monthly	3300	4	13200
Mayapuri	Hindi	Weekly	5000	8	40000
Chanderi	Marathi	Fortnightly	5000	6	30000
Jee	Marathi	Fortnightly	6000	5	36000

The comparative reach and OTS of the two media plans within the new target group definition are summarised in the table below :

Table 9

Chocolates : Comparative reach and OTS of two media plans amongst the redefined target group

	Standard media plan	Media plan using non-media behavioural variables
Reach ('000s)	58	58 (100%)
Gross OTS ('000s)	230	351 (153%)
Total cost (Rs.)	199,800	198,500 (99%)
Cost per thousand reach (Rs.)	3445	3422 (99%)
Cost per thousand OTS (Rs.)	869	566 (65%)

Although the reach of the two media plans is identical, the media plan using the additional data provided by CMS delivers 53% higher gross OTS than the standard media plan, at an almost identical cost.

Thus, by allowing media planners to relate media exposure data with data on variables that enable a more sharply focussed definition of target groups, a syndicated media survey can substantially improve media planning efficiencies.