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RELATIONSHIPS BETWEEN NUMBERS OF READERS PER COPY AND THE CHARACTERISTICS OF MAGAZINES

INTRODUCTION

In media planning in Italy, the information generally used for magazines is readership data for weekly and monthly magazines, obtained from our annual National Readership Survey (ISPI).

There is also another official source of information on magazines: ADS 'audits' on the number of copies sold of each magazine, which provide average circulation figures for individual magazines, with yearly averages as well as by individual months and by distribution channel (news-agent and subscription).

Publishers can apply for their magazines to be included in the circulation audit (which is conducted in an extremely meticulous fashion) in the same way as they may ask for their magazines to be included in the ISPI Readership Survey.

In actual fact, publishers whose income largely depends on advertising have to supply their advertisers both with information on circulation and distribution of the copies sold over the country, and with information on the characteristics of readers.

Until now, these two sets of information have been used alternatively or separately by planners and by marketing men who have, on occasions, made combined use of them, on the basis of their own, personal criteria. Recently, the leading magazine publishers, who commission the ISPI survey, assigned to an advertising planning agency the task of studying the relationships between the two sets of historical data, to identify possible factors (either constant or not) which link the number of readers to the number of copies.

This paper represents a contribution to this important problem, by the

organisation I work for, Doxa, which, for about 14 years*, has been conducting the ISPI Readership Survey in Italy.

NUMBER OF READERS PER COPY OF WEEKLY AND MONTHLY MAGAZINES IN ITALY

In Italy information on the readership of magazines is collected by the 'Recent Reading' method. In other words, a respondent is considered to be a reader of the magazine if he says that he read or looked at any copy of the magazine in the most recent publication interval: in the last seven days for weeklies and in the last 30 days for monthlies. What is measured is therefore not reading of the specific copy, but exposure to any issue of the magazine over a given period of time.

For magazines for which both readership estimates and average data on circulation for the same year are available, it is possible to calculate the average number of readers per copy.

In 1984 the situation was as follows:

	<i>Weeklies</i>	<i>Monthlies</i>
Have ISPI readership data	43	64
Have ADS circulation data	39	48
Have both ISPI readership data and ADS circulation data	35	35
Average number of readers per copy, calculated on group C	5.9	6.9

The average number of readers per copy tends, however, to vary from one magazine to another, the deviation being more marked for monthly magazines.

* In the last few years the ISPI survey has been conducted jointly by Abacus, Doxa and Makrotest.

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	<i>Weeklies</i> (35)	<i>Monthlies</i> (35)
Average number of readers per copy	5.9	6.9
Maximum number of readers per copy	10.6	13.1
Minimum number of readers per copy	2.8	3.2
Standard error	1.9	2.6
Variation coefficient (cv)	32.9	38.1

The fact that the number of readers per copy is very high for some magazines and varies from one magazine to another has sometimes led to doubts as to the reliability of readership estimates obtained from some magazines in certain years.

It is therefore worth trying to find out something more about this phenomenon, by taking our analysis a little further.

**A BRIEF HISTORICAL ANALYSIS,
RELATED TO 23 WEEKLIES**

We focussed our attention on a group of 23 weeklies for which both circulation data and readership estimates have been available for several years.

For this group we checked the level of variability of the average number of readers per copy, over time. Here we compare the values recorded in 1984 with those recorded in 1981 for the same magazines.

	<i>23 weeklies</i>		<i>35 weeklies</i>
	1981	1984	1984
Average number of readers per copy	6.2	6.1	5.9
Maximum number of readers per copy	9.3	10.6	10.6
Minimum number of readers per copy	3.4	3.5	2.8
Standard error	1.9	1.8	1.9
Variation coefficient	30.8	29.5	32.9

We can see that, over several years, there is a certain stability in the structure of the distribution of the number of readers per copy, and that the 23 magazines considered are not very dissimilar from the total of 35 weeklies which now have both readership data and circulation data.

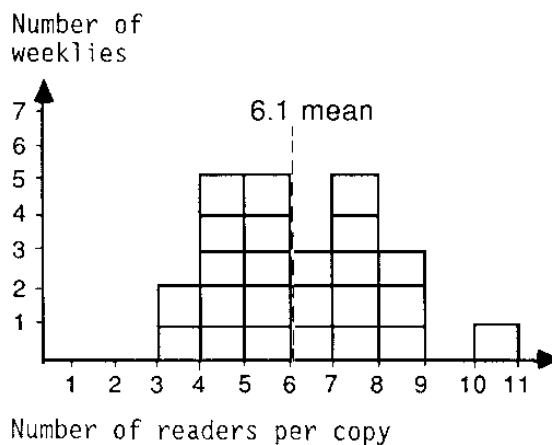
We can therefore continue our analysis relating it only to the 23 weekly magazines for which more information is available.

DETAILED ANALYSIS OF NUMBER OF READERS PER COPY, RELATED TO 23 WEEKLIES

Figure 1 shows the distribution of the 23 weeklies on the basis of the observed frequency of the number of readers per copy.

Even though this distribution does not appear to be strictly 'normal', we can attempt to divide the magazines into three groups: (a) magazines with below-average numbers of readers per copy; (b) magazines with average numbers of readers per copy; (c) magazines with above-average numbers of readers per copy. Circulation and readership values observed for the three groups are shown in Tables 1a, 1b and 1c.

FIGURE 1
Distribution of 23 weeklies according to number of readers per copy



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TABLE 1A
Magazines with below-average
numbers of readers per copy

Magazine		Copies 1984	Readers 1984	Readers per copy (000)
Intimità (W)		468,896	1,654	3.5
Stop (T)		445,684	1,753	3.9
Gran Hotel (T)		607,017	2,557	4.2
Guida TV (TV)		557,976	2,347	4.2
Confidenze (W)		402,750	1,739	4.3
Novella				
2000 (T)		365,256	1,617	4.4
Eva				
Express (T)		210,323	991	4.7
Mean				4.2
Standard error				0.4

W = women's magazines
T = topical events, gossip, romance
photo strips
TV = television programmes magazines

TABLE 1B
Magazines with average
numbers of readers per copy

Magazine		Copies 1984	Readers 1984	Readers per copy (000)
TV Sorrisi				
e Canzoni (TV)		1,836,355	9,128	5.0
Bella (W)		270,326	1,378	5.1
Famiglia				
Cristiana (C)		1,123,071	6,031	5.4
Grazia (W)		374,213	2,200	5.9
Gioia (W)		403,246	2,377	5.9
Annabella (W)		276,354	1,701	6.1
Gente (C)		667,553	4,120	6.2
Mean				5.6
Standard error				0.5

W = women's magazines
TV = television programme magazines
C = current events

TABLE 1C
Magazines with above-average
numbers of readers per copy

Magazine		Copies 1984	Readers 1984	Readers per copy (000)
Intrepido (Y)		307,050	2,171	7.1
Oggi (C)		550,740	3,992	7.2
Il Monello (Y)		231,992	1,695	7.3
Panorama (N)		350,429	2,656	7.6
L'Espresso (N)		300,057	2,279	7.6
Domenica del				
Corriere (C)		234,348	1,883	8.0
Europeo (N)		127,422	1,026	8.0
Amica (W)		209,638	1,814	8.6
Epoca (C)		120,046	1,279	10.6
Mean				8.0
Standard error				1.1

C = current events
W = women's magazines
N = news magazines
Y = young people magazines

The means for the first two groups are fairly close to one another: the mean for the third group is more distant. Within each group, the standard error for the number of readers per copy is lower than the value calculated for the total.

To be sure that this classification of the magazines in three groups (low, medium and high number of readers per copy) was not an arbitrary one, we analysed the variance on the distribution of the variable 'number of readers per copy' among the three groups of magazines.

The variance value obtained is very high and demonstrates that the three groups of magazines are extremely different from one another, as far as the 'number of readers per copy' variable is concerned. This means that weekly magazines in Italy can be divided into the three groups considered, that is: magazines with

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Results of variance analysis

Total variance: 72.2 generated by 23 values for numbers of readers per copy

Variance within the three groups: 12.1 generated by the variability within each group

Explained variance: 60.1 generated by the variability between groups

F value: 49.88 below significance level 0.0001

Regression analysis

Dependent variable: number of readers per copy

Independent variables: sex: % of males
education: % of readers who have attended university or senior high school
Age: % of readers aged 55 and over
social class: % of middle-class readers

above-average numbers of readers per copy, magazines with average numbers of readers per copy, and magazines with below-average numbers of readers per copy. What are, then the factors that can influence the higher or lower number of readers per copy?

variable accounted for by the independent variables. The analysis was applied to each of the three groups of magazines previously considered.

The values obtained for R^2 and R were as follows:

**ANALYSIS OF FACTORS RELATED
TO NUMBERS OF READERS PER COPY**

(a) Socio-demographic characteristics of readers

We considered the hypothesis that the number of readers per copy could be affected by the kind of social group the magazine reaches, ie by the 'socio-cultural class' to which its readers belong.

Since the socio-cultural characteristics of the readers of each magazine are measured in the readership survey, we can take them into consideration as independent variables and we can thus calculate the relationship between these variables and the number of readers per copy, considered as the dependent variable.

We adopted a regression analysis method, calculating the value of R^2 , ie the determination index, which indicates the share of the dependent

Groups of magazines	R^2	R
Group a - magazines with below-average numbers of readers per copy	0.64	0.80
Group b - magazines with average numbers of readers per copy	0.80	0.89
Group c - magazines with above-average numbers of readers per copy	0.37	0.60

The values obtained show that, in the groups of magazines for which the number of readers per copy is on average or below average, socio-demographic variables contribute substantially to the determination of the number of readers per copy. The correlation between number of readers and socio-demographic characteristics of readers of individual magazines is higher than 80%.

Awareness/readership ratio = A

<i>Total of 23 magazines</i>	<i>A = Persons familiar with the magazine, per 'reader'</i>	
Group a magazines - below-average number of readers per copy		18.8
Group b magazines - average number of readers per copy		13.2
Group c magazines - above-average number of readers per copy		18.2

In the case of group c magazines, ie those with above-average number of readers per copy, the readers' socio-demographic characteristics account for slightly more than one-third of the value of the number of readers per copy. In this group too, the correlation between the two phenomena reaches 60%.

To summarise our conclusions up to this point, we can say that the number of readers per copy is connected with the type of socio-cultural universe to which readers of the individual magazines belong. This relationship is higher for magazines with an average or below-average number of readers per copy, and lower for the other magazines.

It is clear that other factors could affect the phenomenon of the number of readers per copy and further analyses would be needed to examine them in depth.

(b) What other variables could affect the number of readers per copy?

It is likely that the number of readers per copy is affected by other factors, ie by the different magazine distribution structure which concentrates on certain types of towns.

Another variable could be the type of 'publishing product', which individual publishers have built over the years. It is possible that the number of readers per copy may be connected with the magazine's contents (specialised, or of general interest) and with the product image that has been established with the target of the potential readers (ie considered a prestige magazine, or not). Another factor could be the awareness of the magazine which makes it, to a greater or lesser degree, 'familiar' to its public.

We have attempted to measure one of these factors: the awareness of the magazine.

A representative sample of the Italian adult population (about 2,000 people) was asked a question on their familiarity with the names of the 23 weeklies we have been considering. Because they are magazines with wide circulation and have been in circulation for a good number of years, the awareness values recorded were all high, between 60 and 90% of respondents.

We then calculated, for each magazine, the ratio between the number of people who know it, at least by name, and the number of readers.

Next we carried out a further regression analysis related to the three groups of magazines, this time adding awareness ratio A to the independent variables (socio-cultural characteristics).

We are thus able to assess what awareness adds to the explanation of the phenomenon of number of readers per copy.

The addition of the awareness value considerably changes the explanation of the phenomenon. The variables considered contribute to determining the number of readers per copy of the corresponding magazines to an extent which varies between 71 and 98%.

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Second regression analysis

Dependent variable: number of readers per copy

Independent variables: sex: % of males

education: % of readers who have attended university or senior high school

age: % of readers aged 55 and over

social class: % of middle-class readers

awareness: number of people familiar with the magazine for each reader

Values of R² calculated

	<i>socio-cultural variables only</i>	<i>socio-cultural variables and awareness</i>
Group a magazines - below-average number of readers per copy	0.64	0.98
Group b magazines - average number of readers per copy	0.80	0.81
Group c magazines - above-average number of readers per copy	0.37	0.71

the magazines that are most widely circulated and read in Italy, ie those which draw on a larger 'reader catchment area' than the other magazines.

Values of R² and R calculated

	R ²	R
Group a magazines - below-average number of readers per copy	0.98	0.99
Group b magazines - average number of readers per copy	0.81	0.90
Group c magazines - above-average number of readers per copy	0.71	0.84

The extent to which the explanation is attributable to the awareness factor rather than to the other socio-demographic factors can be assessed by comparing the two sets of R² values obtained.

The awareness variable appears to have greater effect on magazines with higher or lower than average number of readers per copy, and less effect on magazines which have an average number of readers per copy. It has to be pointed out, however, that this last group includes

CONCLUSIONS

We have identified, in Italy, three groups of magazines, in terms of number of readers per copy: magazines whose number of readers per copy is significantly lower than average, magazines whose number of readers per copy is on an average level and magazines whose number of readers per copy is significantly higher than average.

We have also singled out a number of variables which affect the value of the number of readers per copy. The 'traditional' socio-cultural variables - such as sex, age, education and social class - considered as a whole, carry most weight in determining the number of readers per copy, especially for magazines with average number of readers per copy.

Awareness of the name of the magazine also has considerable influence in determining the number of readers per copy, particularly for magazines with higher or lower than average readership values.

Altogether, our analyses demonstrate that the two types of variables considered (socio-cultural characteristics of readers and

awareness of the magazine) account for three-quarters or more of the variability of the numbers of readers per copy.