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From far-fetched ideal to practical usefulness: towards a better definition of readership

INTRODUCTION

Between that what we want to know and need, and what is measured in research practice, there is very often a difference, sometimes even a gap. There are several factors contributing to that difference. Sometimes it is inevitable, more often there are pragmatic objections and difficulties (like time and money), but far too often we encounter problems of a less rational and more emotional origin.

The usual way to overcome the problems is compromising (leading sometimes to committing oneself). So one perhaps reaches the point of pragmatic agreement for the loss of practical usefulness. It is seldom we ask ourselves whether and to what degree we are allowed to compromise, what the effects of compromises might be, and so on. We think too many of the compromises implicit, because they have sneaked into our definitions and are accepted in the long run without any further consideration. All this holds for media research too.

In this paper we try to examine how far the main goal of media research can be realized. We go into the question how we can minimize our compromises and how to make them explicit. Furthermore, we pay some attention to the problem of evaluating the costs and results of our compromises.

This is rather an ambitious undertaking, so we hope we can avoid the pitfalls. Certainly it is so ambitious that we do not expect to overcome all the obstacles between our ideal and what we can accomplish now. However, we do hope to come somewhat nearer to the practical usefulness of media research.

In this paper we first look into the shortcomings of our 'average issue readership'. We show that telescoping is much more substantial than some of the optimistic people among us dream of and — last but not least — we propose another kind of readership: HARDCORE READERSHIP.

Hardcore readership is a kind of readership that is much nearer to such measurements of advertising reach as opportunities to see, page traffic, spread traffic and reading traffic.

THE IDEAL

The starting point in media research should be the

consideration that such research should provide advertisers and agencies with data that can be used in making — in principle — optimal media plans, optimal media plans being schedules that are finely tuned to the necessities of the advertising goals. With those plans we can, together with good advertisements (and/or commercials) achieve the desired advertising effect against the minimal investment in campaign costs.

In real life, however, this definition will not hold. Nearly always the advertising budget is one of the given data (at least for media planners) so it comes down to maximizing results for fixed costs. Therefore we formulate as a working definition: An optimal media plan gives, for given campaign costs, maximum results in terms of the desired advertising effects.

The usual measures of readership do not meet the requirements if we want to make media plans according to this definition. It is also clear that the theory 'how advertising works' has as many holes as there are holes in an Emmental cheese. Because of all this it is not really possible to evaluate the consequences of sub-optimal media planning in terms of advertising effect or even in terms of money.

HOW DOES ADVERTISING WORK?

We shall not digress, and therefore we restrict ourselves to a few remarks regarding the problem of the working of advertising. To date various disciplines have developed an abundance of models. They go from the simple and well known AIDA model, and other verbal translations of assumed casual relationships, to advanced and rather complicated econometric models. The most important benefit of the latter kind of models is that it is not necessary to translate (even if it were possible) the mathematical formulae they are usually written in.

Very superficially, there are two stages in the working of advertising. The first one goes from circulation (for the press media; equivalents for other media) through the confrontation with the medium to the confrontation with the advertisements or commercial. The second stage goes onward from that confrontation via the phenomenon called perception to the creation of advertising effect.

The first stage is a sequence of more or less concrete

steps and/or activities. The second stage is more abstract and even more complex than the first one. We have also to distinguish between the advertising message itself (that which should be communicated) and the form it is moulded into, the advertisement or commercial. One and the same message can be presented in entirely different forms and can be disseminated through entirely different media, like television, radio and press. The already mentioned AIDA model concentrates on the second stage in the working of advertising. As we are primarily interested in the intricacies of the first stage we have no need for AIDA and AIDA-like models. The models we need, however, do not exist unless this symposium produces some.

CONFRONTATION WITH THE ADVERTISEMENT

Adhering to the maxim "Who controls is responsible" media owners are responsible for what happens in the first stage, 'from circulation to confrontation with the advertisement or commercial'. Therefore the product the media owner should sell is not circulation (as it was not so long ago), not average issue readership or GRP (as it is now), but exposure to the advertising space (ASX). We might state it as follows: The physical availability of a medium is a necessary though not sufficient condition for confrontation with the medium (medium-exposure or MX); medium-exposure is a necessary though not a sufficient condition for advertising space exposure (space here includes time); advertising space exposure is a necessary though not sufficient condition for confrontation with the advertisement or the

It is easy to see that what is lacking in 'sufficiency' is only partially under the control of the media owner. To illustrate this we give the following (certainly not comprehensive) list of factors that may contribute to the communication power of an advertisement or commercial.

- (a) the media environment
- (b) physical properties of the advertisement/commercial like colour, size, shape, contrast, clearness, sound and
- (c) the physical environment the individual is in at the moment of exposure to the medium
- (d) the 'absorption capacity' of the individual
- (e) the amount of information the individual is exposed
- (f) the interest of the individual in the product or service offered.

Only (a) and a minor part of (b) are really under the control of the media owner. It is however not easy to determine in what way the media environment contributes to the intended effects. The contribution

may be negative or positive and sometimes media owners can control the direction of the contribution. The size of the contribution, however, is quite another matter. Summarizing, we might say that the contribution of the media environment depends on a complex of factors, making generalizations virtually impossible.

Some work has been done to estimate the contribution of the factors under (b) but we pretend too much if we claim to know all about it. The same applies to the other factors from (c) to (f). We suspect however that in this phase there is a lot to gain. These gains we expect to be higher than the gains to be obtained when optimizing media planning.

So it is a promising field of research, but less the domain of media research than that of advertising research. The boundary between the two domains is, however, vague and blurred. As it is we restricted ourselves to the subject of ASX and the conditions leading to ASX. A compromise, of course — but we think an inevitable and acceptable one.

MORE COMPROMISING

The second compromise, or to be more exact, the second sequence of compromises relates to the path from circulation to ASX. Until now most research has been restricted to the few steps leading from circulation and the like to medium exposure. This short distance too is paved with compromises, a kind of paving even worse than good intentions and consequently leading us even further than hell. There is no need to digress; let us limit ourselves to a few keywords like telescoping, duplicated readership, replicated readership, and such related issues as recency vs TTB.

However bad the forementioned compromises may be, we have left the worst one until now. It is the implicit assumption the medium exposure is about the same as advertising space exposure. It is evident that such equality in the number of exposed individuals does not

Anyone will admit that, but only a few wish to do something about it. Mostly the implicit assumption is defended by stating that it is not the absolute value of ASX that counts but the relative values for the media under consideration. In other words: the MX-shares determine the ASX-shares, or, a medium with twice the amount of MX will have about twice the amount of ASX. Certainly we are careful enough never to forget the 'about' to show that it is only an approximation.

Unfortunately our assumption is untrue as well as unfair. If we accepted this kind of assumption one would also be right in saying that China is four times as rich as the USA because one billion inhabitants is four times 250

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million inhabitants

There is also some research supporting this point of view. One of the outstanding research projects that prove the MX-shares do not reflect ASX-shares is Springer's "Lesequalität" — the Quality of Reading.

Besides being untrue the implicit assumption is also unfair. Due to this assumption the interests of some publishers are damaged while their competitors benefit. But who cares about publishers' interests? The problem however, is worse, because it concerns not only media-owners but advertising as a whole.

Due to sub-optimal media planning resulting from the false assumption, advertising budgets are misallocated. This misallocation can lead to the vanishing of products and perhaps ultimately to the death of companies. This is perhaps far-fetched, but "little strokes fell great oaks".

THE DEFICIENCY OF AIR

Why is it that AIR and related media-exposure measures do not work in the way we want? As we have already said the relationship between MX-shares and ASX-shares is not a stable one: it changes over time, from medium to medium, and certainly from media type to media type.

It all boils down to the definition of our 'average issue'. Ideally the measure of AIR should refer to an average of issues. In order to create an operational measure however, it was thought necessary to deviate from the concept of issue, and to measure instead the reading/viewing in an interval of time, regardless of the issue. So it does not matter whether one has read the April issue of *Readers Digest* or the May issue.

What matters is that they were read in the last month. Our AIR or average issue readership is at the least misleading in its name. It has nothing to do with a particular issue or an average issue, though perhaps (but we doubt it) something to do with an average interval.

Therefore it is possible that such phenomena as duplicated readership (more than one issue in the interval) or replicated readership (one issue in more than one interval) and telescoping (extension of the interval) not only can occur but do play an important role in the measurement of reading.

To illustrate the weaknesses of AIR we concentrate on the phenomenon of telescoping. We do this because the latest NOP survey (NOP '82) gives us the data we need to prove that the AIR as NOP measures it is not a good measure of reading in the interval.

One of us formulated his objections to the NOP '82 AIR in October last year (Costa Tchaoussoglou in Adformatie October 7, 1982: "De fictieve robuustheid van NOP '82" — "The fictitious robustness of NOP '82"). He based his objections on the so-called test for

robustness (The other author, Joop van Vliet, presented results from this test in Stockholm in April 1982: "Radical changes in the Dutch NRS").

Perhaps this is a good occasion to remark that we or at least the enterprises we are working for — did not participate in NOP '82. The decision not to participate was not made because we suspected the NOP '82 results of being biased against our media. It was based on our conviction that the new NOP '82 method did not solve the real problem, and the main reasons for the more general objections continued to exist. We should like, however, to remark further that our analysis of the phenomenon of telescoping was possible only because this particular NOP '82 survey furnished the right data for it. A virtue — and not a mean one — of the survey. Furthermore we should emphasize that NOP '82 is not a bad survey. A lot of thinking, knowledge, effort, dedication and money has been put into the survey and its pilots, and nobody can be blamed for sloppy work. So the NOP '82 survey is perhaps one of the best of its kind but it is simply the wrong kind of research.

HOW MUCH TELESCOPING IS THERE?

The technical details of our search for the telescoping effect are given in the Appendix. Summarized, this boils down to the possibility of setting an upper limit to the number of readers who read exactly seven days ago. Not particularly complicated mathematics lead us to the conclusion that the d₇-group (the readers who read exactly 7 days ago) must be less than 20% of the sum of the d_2 , d_3 , d_4 , d_5 , and d_6 - groups (people who read from two to six days ago). In this way we found that people cannot estimate with sufficient precision what they did in the last week, and that they tend to extend the weekly interval up to perhaps 10 days or more. There is nothing new in this finding, because William Belson discovered the same some 30 years ago. We however did it for readership and not for the buying of confectionery, shoe polish and other less frequently bought products.

Because of the period of one week, we restricted ourselves primarily to the weeklies. If we can speak of an intra-AIR telescoping-effect however, we find telescoping with the AIR-measures for monthlies too.

For the weeklies the telescoping differs. The opinion weeklies as a group show the highest proportion of telescoping. Radio and TV guides have the lowest amount of telescoping.

For opinion weeklies the AIR measurements should be reduced by about 30% or if we put it another way the observed AIR is at least $(100/70 \times 30\%)$ 43% too high.

Woman's weeklies and gossip magazines are exaggerated by at least 29%. General illustrated magazines are more than 28% too high, and

programme magazines are 9% too high.

For some subgroups of readers the telescoping effect is substantially lower than for other readers. If we look for frequency we find that the 12 out of 12 readers do not suffer as much from the telescoping effect as the other frequency classes do, albeit they show more telescoping than subscribers do. We cannot pursue this illustrative and interesting point at this moment but it is our intention to make all the data available to those who wish to analyse the phenomenon in detail.

TOWARDS BETTER MEASUREMENTS

Having shown that telescoping exists and is a substantial contribution in the bias of AIR measures, we cannot rest and be content. We have to go forward and strive for better readership measures, measures that contribute to solving the media planning problem already mentioned. There are two alternatives:

- (a) try to determine the absolute ASX or, if that is not possible, try to determine the ASX-shares for the media under consideration;
- **(b)** try to find a form of media exposure that is near as possible to ASX-values. In other words, look for a form of MX with ASX. /MX, constant for most of the media i.

Superficially this is shifting the problem from (a) to (b). In order to fulfill the condition in (b) we should have measures of the ASX-values. This is, however, too much of a simplification. We must distinguish between large scale multi-media research and much smaller, very carefully designed and almost perfectly controlled surveys.

The large surveys are unfit (or at least inefficient) for determining ASX-values. The small surveys offer possibilities if we restrict ourselves to a limited range of media titles and a minimum of additional questions.

Why all these problems, all this trouble? Why should we not simply admit that our media research is imperfect and accept the consequences? At least the costs of media research are bearable — or are they not?

We do not know the situation in every country but we do know the situation in our country. In the Netherlands media research is paid for mainly by publishers. Most of them pay willingly regarding media research as a service to their clients. Furthermore, they like to have a finger in the pie and perhaps even see research as a means of manipulating advertising budgets. In short, they expect some profit out of their media research investments.

However circumstances change. Publishers have — in general — less money for research than they had a few years ago. Advertisers and agencies do not like the idea of manipulation (or at least of being manipulated). Finally, some of the publishers have learned that most of

the profits go to their competitors because the competitive media are overrated, while they have to pay their contribution to the costs of unfair research.

Therefore media research in our country is in stormy weather. Suddenly the NOP survey is no longer the only reliable standard of media research. The status of NOP is threatened and under prolonged discussion. Alongside NOP '82 we have the NIPO (Gallup) media survey and the Mediascanner, and perhaps within a few months some publishers will start their own survey — a kind of intermediate NOP survey.

All these surveys, however, measure some kind of AIR. In some cases the AIR measures do not suffer as much from exaggeration as NOP '82' but they are still AIR and consequently inflated readership values.

HARD CORE READERSHIP

We have no objections to competition in the field of research. Sometimes it may induce a waste of money but mostly it contributes to furnishing us with better research. One can, however, have too much competition, and then there will quite certainly be a waste of money. Therefore the research situation in the Netherlands is not as we would like to see it.

We think there should be a combination of efforts instead of the confusion we encounter now. Only when we co-operate we can look for more objective and more useful measures of readership.

The question is, of course, which way we ought to go from here. As the Cheshire cat said: "That depends a good deal on where you want to get to". If we insist that it is sufficient as long as we get *somewhere* "then it doesn't matter which way you go". If we walk long enough we get somewhere, that is true.

We want, however, to suggest some directives which do not contradict the measurement of reasonably stable ASX,/MX, mentioned under **(b)** above.

We think we should look for what we call 'kernbereik' or 'hard core readership'. We found that there are categories of readers who are less sensitive to the way we organize our readership surveys and ask our readership questions. Subscribers, for example form a rather stable group of readers, have a high reading intensity and therefore probably a high ASX/MX-value.

Looking at frequent readers (the 12 out of 12 and the 6 out of 6 groups) we find comparable results.

We do not know yet how we should describe hard core readership, but readers' characteristics like subscribers, 12 out of 12, read at home and highest reading intensity have something to do with it.

We should look for the right characteristics, and these may differ from media group to media group. We even expect that some kind of research is good for some

media types and that other media types require other kinds of research.

Whatever the outcome, our target is hard core readership, a kind of readership that is: stable in time (within limits); a fair representation of the ASX-shares; insensitive to changes in questionnaires; insensitive to changes in interviewing circumstances; insensitive to other biassing influences.

We think there exists such a kind of hard core readership, and we think we should look for it. We do not think it is an easy task, and the task of convincing media planners and advertisers seems an especially tough one.

In a qualitative survey into the matter of such acceptance (executed by R&M for Cebuco) it was found that those concerned with planning would accept the new concept 'kernbereik' only if certain conditions were fulfilled. To name a few: it should be an 'objective' measure and not reek of publishers' interests. Furthermore it should be understandable and void of complications, and of course it should be workable and useful.

WHO SHOULD BE CONCERNED WITH RESEARCH?

There is a lesson to be learned from these findings. It is a simple lesson. Media research has too long ignored the users. Media research was too long a field for the specialist only. The specialist decided what kind of data the media planner should work with and how these data were to be obtained. So we got somewhere at least. We should, however, reconsider and try to go where we can make better media plans based on useful and objective data.

In order to reach that goal we have to involve media planners and advertisers into our media research, otherwise we had better stop and switch back to circulation audits.

CONCLUSION

We have proved that the kind of media research we do at the moment is not instrumental for good media planning. Our readership measurements (especially those based on the concept of AIR) are biased and do not reflect the ASX-values for the media under consideration. So they are not suitable for optimal media planning in the sense of producing plans that produce maximum advertising effects at given costs.

We have measured telescoping and found that for weeklies the AIR are exaggerated by at least 25% to 30%, with the exception of the radio and TV guides (with less than 9%)

We have introduced the concept of hard core readership, and suggested some of the requirements for this concept. Furthermore we have suggested some readership characteristics correlating strongly with hard core readership.

And, finally, we have mentioned the fact that media research is too much a specialists' job, and stated that users should be more concerned with research and be actively involved with it.

APPENDIX

How reliable is the recency question?

From the Dutch National Readership Survey 1982 we estimate Average Issue Readership (AIR) based on the results of the recency question. Our recency question uses a 13-point scale from "never" to "yesterday". For reasons of simplicity we restrict ourselves to the weeklies (generalization to other issue periods remains possible) and therefore to one end of the scale, namely: one week ago; five to six days ago; three to four days ago; the day before yesterday; yesterday.

Readers claiming that their last reading occasion was in one of these five categories belong to the readers in the last issue period, or readers in the last week. Far too glibly we assume these readers as being equivalent to Average Issue Readership, a point we discuss later. By definition, readers in the last week have at least one reading day within that period. To distinguish between last-week readers and the true AIR we denote the first group with W. (For dailies we take D, for monthlies M and for bi-weeklies B. Reading in the last quarter we can denote with Q and reading the last year consequently with Y).

We can split up W into seven groups of people, according to their number of reading days. The number of people having exactly one reading day we call r₁, those with 2 reading days r_2 , and so on, up to r_7 .

We can also split W quite another way, namely according to the last reading occasion. The number of people who read yesterday is d_1 , and so on up to d_7 (the number of people who read exactly seven days ago). So we have the following definitions:

$$W = r_1 + r_2 + r_3 + r_4 + r_5 + r_6 + r_7$$
 (1)

$$W = d_1 + d_2 + d_3 + d_4 + d_5 + d_6 + d_7$$
 (2)

The distribution of reading days over the week

Some days of the week have a better chance of becoming a reading day than others, although it will vary from magazine to magazine: a magazine bought on Saturday will presumably be read better at the weekend, and perhaps some groups in the population do not read at all on Dallas evenings. Therefore it is advisable to

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spread our interviews evenly over the days of the week. Unfortunately it is impossible to interview on Sundays, and Saturdays are also very difficult. So we have about 9% of our interviews on Saturdays and 16% to 21% on the other days of the week (Monday usually being the highest).

Reweighting can help a bit but will not replace the lacking Sunday interviews. We found that reweighting the NOP '82 material did not help us very much, so it is quite immaterial whether we use weighted or unweighted figures (weighting, of course, with respect to the day of interview). Although improvements always will be possible, we think our data good enough — so far as concerns the evenness of spread — to use for further analysis.

The readers with one reading day only will — under the assumption of an even spread of the interviews have an even spread of the last reading occasion over the days of the week. So for this class of readers we will find: $d_1 = d_2 = d_3 = d_4 = d_5 = d_6 = d_7$.

However for the other classes d_7 will be 0, for if one has 2 or more reading days it is not possible having 7 days ago as the last reading occasion. The class with 7 reading days must claim the last reading occasion (not counting today) as being yesterday.

Working this out we get the distribution-matrix: 1/7 6/21 15/35 20/35 15/21 6/7 1/1 1/7 5/21 10/35 10/35 5/21 1/7 1/7 4/21 6/35 4/35 1/21 **D** = 1/7 3/21 3/35 1/35 1/7 2/21 1/35 1/7 1/21 1/7

The column-vector d can be calculated from $\mathbf{d} = \mathbf{D}.\mathbf{r}$ with \mathbf{r} being the column-vector of values \mathbf{r}_i : $(\mathbf{r}_1 \mathbf{r}_2 \mathbf{r}_3 \mathbf{r}_4 \mathbf{r}_5 \mathbf{r}_6 \mathbf{r}_7)$.

The total number of people having read 5 days ago

 $d_5 = 1/7.r_1 + 2/21.r_2 + 1/35.r_3$

It can be easily proved that the values of d_i for ascending i will form a monotonous and not rising sequence, or:

 $d_7 \le d_6 \le d_5 \le d_4 \le d_3 \le d_7 \le d_1$ In case of the NOP '82 survey we do not know d_6 and

 d_5 separately or d_4 and d_3 separately, although we do know the sums of the values ($d_6 + d_5$) and ($d_4 + d_3$).

According to (3) we find:

$$d_7 \leq (d_6 + d_5 + d_4 + d_3 + d_2)/5$$
Or $d_7 \text{ (max)} = (d_6 + d_5 + d_4 + d_3 + d_2)/5$
(5)

So, if we find d_7 values higher than d_7 (max) we may presume that there is something amiss in the distribution of our d values (see **Table 1**).

TABLE 1 Values of d₇ /d₇ (max) for three surveys:

	NOP '82	Centrum	Media- Scanner
Woman's Weeklies	3.1	3.3	1.8
Gossip magazines	3.3	3.7	1.9
Illustrated magazines	3.3	3.1	1.2

Telescoping

Too high d_7 -values can originate from telescoping and from shifts within the distribution of d_1 values. So it is possible that people drift from the true d_2 class to the d_1 class, thus reducing the value of d_7 (max). In that way we find our d_7 values too high although in reality they can be true

This is, however, rather unlikely. The shorter the interval between the last reading occasion and the interview the better our respondents will succeed in giving the right answer on our recency question.

On the other hand it is possible that people drift away from their true d_5 or d_6 claims to the d_7 claim, which is not a totally unlikely event because the phrase one week ago could be interpreted as in the last week. We expect, however, this drift to be more than offset by the telescoping effect, or the drift from d_8 , d_9 , d_{10} and so on to the d_7 class.

The various distributions of the readers over the d_i classes strengthen this conviction.

To be sure, our findings do not prove with certainty that telescoping exists, but certainly there is a lot of circumstantial evidence.

The following tables show some of the results.

TABLE 2 The last reading day according to the way the issue was obtained; PANORAMA (an illustrated weekly) (absolute figures)

Loct roading		reading	sub-	single	not	other
Last reading						
occasion	ALL	circle	scribers	issue	bought°	answers
1 week ago	720	244	32	84	224	136
5-6 days ago	328	136	17	38	73	64
3-4 days ago	5 38	266	42	39	92	99
2 days ago	211	94	27	20	3 9	31
yestérday	411	186	50	38	69	68
W	2208	926	168	219	497	398
2-6 days ago	1077	496	86	97	204	194
d ₇ (max)	215	99	17	19	41	39
d_7 (max)- d_7	– 505	- 145	– 15	-65	- 183	 97
W° ′	1703	781	153	154	314	301
W°W	771	843	911	703	632	756
°not bought and	read elsewhe	re, not in th	ne home			

The last reading day according to the way the issue was obtained; TROSKOMPAS (a programme magazine) (absolute figures)

Last reading occasion 1 week ago 5-6 days ago 3-4 days ago 2 days ago yesterday	ALL 183 76 116 138 1032	reading circle	sub- scribers 33 20 51 88 835	single issue 14 10 6 10 77	not bought* 117 40 44 24 50	other answers 19 6 15 16 70
W	1545	1027	117	275	126	
2-6 days ago d ₇ (max) d ₇ (max)- d ₇ W° W°/W °not bought and	330 66 – 117 1428 924 I read elsewhe	re, not in th	156 32 - 1 1026 999 ne home	26 5 - 9 108 923	108 22 - 95 180 655	37 7 - 12 114 905

TABLE 4 The last reading day according to the way the issue was obtained; NCRV-Gids (a programme magazine) (absolute figures)

Last reading		reading	sub-	single	not	other
occasion	ALL	circle	scribers	issue	bought°	answers
1 week ago	86		29	3	47	7
5-6 days ago	31		9	2	17	3
3-4 days ago	73		26	2	36	9
2 days ago	96		79	0	12	5
yesterday	636		581	8	27	20
<u>W</u>	922		724	15	139	44
2-6 days ago	200		144	4	65	17
d ₇ (max)	40		23	1	13	3
d_7 (max)- d_7	-46		6	- 2	-34	-4
Wo	876		718	13	105	40
W°W	950		992	867	755	900
onot bought and	read elsewhe	re, not in th	e home			200

The last reading day according to the way the issue was obtained; **ELSEVIERS MAGAZINE** (an opinion weekly) (absolute figures)

Last reading		reading	sub-	single	not	other
occasion	ALL	circle	scribers	issue	bought°	answers
1 week ago	215		42	44	7 3	56
5-6 days ago	72		20	18	18	16
3-4 days ago	89		32	13	19	25
2 days ago	41		17	12	4	8
yesterday	87		46	4	15	22
W	504		159	81	129	127
2-6 days ago	202		69	43	41	49
d ₇ (max)	40		14	8	8	10
d_7 (max)- d_7	- 175		- 28	- 36	-65	- 46
Wo	329		131	45	64	81
W°W	653		824	556	496	638
onot bought and	read elsewhe	re, not in th	e home		,50	330

TABLE 6
The last reading day according to the way the issue was obtained;
VOETBAL INTERNATIONAL (soccer magazine) (absolute figures)

Last reading occasion 1 week ago 5-6 days ago 3-4 days ago	<i>ALL</i> 195 74 100	reading circle	sub- scribers 53 22 38	single issue 32 10 9	not bought° 64 25 29	other answers 46 17 24
2 days ago yesterday	59 124		32 66	4 18	10 26	13 14
W	552		211	73	154	114
2-6 days ago d ₇ (max) d ₇ (max)- d ₇ W° W° <i>N</i> W °not bought and	233 47 - 148 404 732	ere not in th	92 18 - 35 176 834	23 5 -27 46 630	64 13 51 103 669	54 11 - 35 79 693

TABLE 7
The last reading day according to the frequency of reading; readers who read
12 out of 12 issues

		Tros-	-	Elsev	
Title	Panorama	Kompas	: NCRV-Gids	: Magazin	e International
1 week ago	365	57	36	67	101
2-6 days ago	714	225	134	119	157
yesterday	305	815	641	66	100
W	1384	1263	811	252	358
d ₇ (max)	143	45	27	24	31
d_7 (max)- d_7	-218	- 12	-9	– 43	- 70
W°	1166	1251	802	209	288
W°W (subscriber) onot bought and rea		(.999).990 It in the home	(.992).989 e	(.824).829	(.834).804