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**Average issue readership -
there is something wrong!**

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In this paper, I should like to draw attention to an inherent flaw in the method of measuring readership that is used by the National Readership Survey, the Target Group Index and many other surveys throughout the world. This readership method has been used in Great Britain for as long as most of us can remember; it provides the basis for press media planning and the currency by which newspapers and magazines are bought and sold. And yet it has a defect which distorts the readership of some publications to an extent which is dangerously misleading.

The problem lies in the readership question itself, which is known as the "recent-reading" or "recency" method. The reader may recall that respondents are asked when they last saw a copy of a publication; if they claim to have done so in the last "publishing interval", for example in the last week for a Sunday newspaper or weekly magazine, or the last four weeks for a monthly magazine, they are included in the "average issue readership". Now that would be quite correct if the reading event in the last publishing interval were the first time the respondent had seen the particular issue of the magazine. But if he or she picks up or reads the magazine at any point outside the issue-period in question, then, using the N.R.S. methodology, that reading event is counted again. That phenomenon, which is called "replication", can seriously inflate the apparent "average issue readership" estimate for a magazine. A respondent can be given a copy of a magazine at Christmas and happily read it again and again every week for the rest of the year and into the future. If asked in any subsequent month whether or not he or she has read that particular magazine in the past four weeks, the respondent can reply, perfectly correctly and truthfully, in the affirmative. The recency method will treat that respondent (or his or her equivalent) as an "average issue reader" every time the original copy is picked up again in a fresh issue-period.

The readership is artificially inflated because the recency method cannot distinguish between "publishing interval reading occasions" and "average issue readership", that is between frequency and coverage. That might not matter so much from the point of view of establishing a "readership currency" by which advertising in publications is priced, bought and sold, if all publications were inflated by approximately the same degree. But they are not. Replication is caused by reading a publication again in one or more subsequent issue-periods; it is more likely to occur in magazines which have a longer publishing interval, are non-topical (i.e. where the editorial content does not become quickly out-of-date), are robust and can stand repeated handling without falling to pieces and are used for reference or contain lengthy and detailed instructions. Replication thus is less likely to occur for daily newspapers which are highly topical, but tends to increase with the publishing interval and is at its worst with magazines which are bought occasionally but used repeatedly for reference long after their original publication. The effect of the phenomenon is that, wherever the recency method is used (as in the N.R.S.), the "average issue readership" estimate of magazines, particularly monthly magazines, is inflated relative to daily newspaper "average issue readership". When referring to recent reading estimates, one can only use the term "readership" in the loosest possible sense!

We can check the credibility of the N.R.S. "readerships" by dividing by the circulation in each case to obtain "readers-per-copy". Some of the readers-per-copy figures are absolutely incredible, as can be seen from these figures taken from the National Readership Survey (January-December 1992).

Monthly magazine	N.R.S. "readership" '000	Circulation '000	Readers per copy
WHAT CAR	2099	139	15.1
CUSTOM CAR	608	34	18.0
WHAT BIKE	446	21	21.2

Remember that those figures are averages; for every person who keeps his copy of What Bike to himself, another copy must be read by over 40 people to get to that average of 21.2. Of course, these "readership" figures are plainly ridiculous. "What Car" provides details of every motor car on the market. An issue can be 300 pages long; it is crammed with information and it is used for reference again and again; 75% of all readers claim to do so "only occasionally". It is beyond all credibility that each copy is read by 15.2 people; it is far more likely to be an average of 1.5 readers-per-copy, each picking up the magazine an average of 10 times each. The trouble is that the N.R.S. recent reading technique cannot distinguish the difference.

The problem of replication is not a new one. Over 30 years ago, in 1962, the Thomson Gold Medal and Award (ref. 1) was offered for the best solution to the problem of replication. I drew attention to the problem again over 20 years ago in an article in ADMAP in January 1973 (ref. 2), although in those days, being younger, more respectful and less sure of my facts, I entitled it "Is there something wrong?". Since then, because of the distortions caused by replication, the recent reading method has been attacked by logically-minded media researchers all over the world and the subject has been raised (and tempers as a result) at every one of the International Readership Research Symposia since 1981. At the Montreal Symposium in 1983, papers by Jean-Michel Agostini (ref. 3) and Wally Langschmidt (ref. 4) drew attention to the possibility of validating readership by means of circulation and copy-origin data. However, it is only recently that extra information has been included in the U.K. National Readership Survey, which provides the evidence to discredit the recent reading technique beyond any reasonable doubt.

Before I go on to describe the new evidence, which inevitably involves an element of mathematics, let me get you into a numerate frame of mind with a simple little arithmetical problem. Let's say that you are driving home after work, the traffic is much as usual getting out of town and, by the time you are exactly halfway home, you find you have been travelling at an average speed of exactly 10 miles per hour. By then you have reached the motorway, which is miraculously clear and leads you all the other half of your journey to your home. How fast do you have to travel on the second half of your journey, to have done the whole trip at an average speed of 30 miles per hour? Just jot down the answer before reading any further.

Many people would say that one would have to travel at 50 m.p.h. for the second half of the journey, to combine with the 10 m.p.h. of the first half to give an average of 30 m.p.h. At first sight, it looks a reasonable answer, but it is wrong. Let's say the journey is 20 miles. At 10 m.p.h., the first half of your journey would then take an hour. If one did the second half at 90 m.p.h., it would take another 6 or 7 minutes, meaning that it would have taken over an hour for the 20 mile journey and the average speed for the whole journey would be 18 m.p.h. And even if one could travel infinitely fast, doing the second half of the journey in no time at all, the first half of the journey still took an hour and the average speed for the whole journey can never exceed 20 m.p.h. It may be helpful to remember that little calculation while we look at the validation of the N.R.S. average issue readership estimates using new information about the source of copy.

It will perhaps be easiest to explain the method by taking a specific example of a magazine, in this case the weekly television programme magazine "Radio Times", which has the largest circulation of any weekly magazine in the U.K. I emphasise that otherwise there is nothing unusual about the magazine and the principles described below could be applied equally to any other publication. The January-December 1992 N.R.S. gave an "average issue readership" estimate (using the recency method) of 5,558,000 readers aged 16 or over. 79.1% of the A.I.R. readers said that it was either "delivered to the informant's home" or "bought at a newsagent or news-stand by the informant or another member of the household" or was a "postal subscription delivered to the informant's home for the informant or another member of the household". In other words, 79.1% of the A.I.R. readers claimed to have read a "household" copy, as opposed to an "office or work" or "someone else's copy" (who does not live in the informant's household). If we apply that percentage to the total 16+ adult average issue readership, we can derive an estimate of the number of those aged 16+ reading a copy originating in their own home.

All adults aged 16+ reading Radio Times

A.I.R. (Recency method) (000)	% reading household copy %	"Household" readers (with household copy origin) (000)
5,558	79.1	4,396

It is also possible to tabulate from the N.R.S. the average number of people aged 16+ in the households of average issue readers of the Radio Times (which is why I have taken adults aged 16+ in this case, rather than the normal 15+). If we assume that all the occupants of the household are potential readers of the Radio Times, we can divide the average size-of-household figure into the "household readers" to find the minimum number of copies necessary to generate the household readership.

All adults aged 16+ reading Radio Times

Household readership (000)	Average size (16+) of household	Minimum copies (000)
4,396	2.42222	1,815

Having calculated the minimum number of copies necessary to provide the household readership, we can then proceed to the next stage of validation which is to compare the figure of 1,815,000 copies with the total audited circulation. Unfortunately, we then discover a horrible inconsistency; the total average U.K. Radio Times circulation for the period January-December 1992 was only 1,574,384 which is significantly less than the minimum number of copies needed to achieve the household readership, let alone the other 1,162,000 readers who see an "office/work" or "someone else's" copy.

Clearly, there is something drastically wrong. We should perhaps just re-check our assumptions to see how varying them affects the conclusion. First, we assumed that all the members of the household read the magazine; that could easily be an over-estimate. However, if we reduce the number of average readers-per-copy within the household, the minimum number of copies necessary then increases, which makes the situation worse. For example, if for the Radio Times we assume that there are only 2 readers-per-household rather than the full

2.42222, then the minimum number of copies necessary to provide the household readership of 4,396,000 increases to 2,198,000, which is over 620,000 copies more than the actual circulation.

The next figure that we might examine is the 79.1% of the readership claiming to have seen a "household" copy. It is interesting to note how very different the percentage of the readership seeing a household copy has to be before the various data become consistent. In the case of the Radio Times, in order to generate the A.I.R. readers from the given circulation, the percentage of "household" readers cannot be greater than 68.6% and that assumes (i) readership by all members of every household and (ii) that all the remaining 31.4% (over 1.7 million readers) are generated solely from passed-on household copies! There is a simple mathematical relationship between the maximum readers-per-copy and the percentage of readers seeing a household copy; I shall return to that point later on.

Given the circulation, the percentage of the readership seeing a "household" copy and the maximum possible readers-per-household (taken to be the average number of those aged 16+ per household), it is possible to calculate the total maximum readers using the following method; if the average issue readership estimate exceeds the maximum readership, then the A.I.R. estimate must be incorrect.

Given: Circulation, Household readership percentage, Average size of household.

(1) Maximum no. of household copies = total circulation

That assumes that some or all of the household copies are later passed on to generate the "out-of-household" readership.

(2) Maximum household readership = $\frac{\text{Average size of household} \times \text{Maximum no. of household copies}}{\text{Household readership percentage}}$

(3) Total readers = household readers / household readership percent.

(4) Therefore

Maximum total readers = $\frac{\text{Total circ.} \times (\text{av. size of household}) \times 100}{\text{Percentage of readers seeing household copy}}$

For the Radio Times

Max. total readers (000) = $1,574,384 \times 2.42222 \times 100 / 79.1$
= 4,822 (3.06 readers-per-copy)

The A.I.R. recency estimate of 5,558,000 (3.53 readers-per-copy) is therefore 15.3% greater than the absolute maximum possible readership, given the parameters of circulation and household readership. I have taken the Radio Times to illustrate the problem because it has the largest weekly magazine readership in the U.K. National Readership Survey (January-December 1992). However, the result shown for this particular publication is not an isolated case; indeed, for many magazines the inconsistencies are far more dramatic than we have just seen. In the Appendix to this paper, I show similar calculations carried out for all magazines in the January-December 1992 N.R.S. for which I could obtain audited circulation figures for the same period. I have also summarised, in Table 1 below, the individual figures by showing the average results for General and Women's weekly, fortnightly, monthly and bi-monthly magazine categories. For each category, I show the average "household" copy readership percentage, average household size, the average maximum readers-per-copy, the average A.I.R. readers-per-copy and, where the A.I.R. result exceeds the maximum, the percentage variation from the maximum.

Table 1

Publication category	% seeing household copy	Av. hshld size	Max. rdrs per copy	A.I.R. rdrs per copy	% variation
Av.Gen.Weekly (28)	61.9	2.55	4.4	5.4	22.6
Av.Gen.Fortnightly (4)	68.1	2.86	4.2	4.0	-
Av.Gen.Monthly (60)	56.4	2.52	4.8	8.0	67.3
Av.Gen Bi-monthly (5)	48.8	2.51	5.8	4.3	-
Av.Wom.Weekly (14)	56.2	2.44	4.3	3.9	-
Av.Wom.Fortnightly (2)	73.9	3.20	4.3	2.4	-
Av.Wom.Monthly (42)	50.5	2.44	5.4	6.7	25.9
Av.Wom.Bi-monthly (7)	51.8	2.51	5.0	6.8	37.4

The readers-per-copy estimates, given by the recency method, exceed the maximum for 21 out of the 28 general weekly magazines and are on average 22.6% greater than the maximum (see Table 6 in the Appendix). For the general monthly magazines, 43 out of 60 failed the validity test, and the variation is far more dramatic, with the readers-per-copy average being 8.0 which is 67.3% greater than the maximum figure. That, of course, is completely consistent with other evidence that the replication phenomenon affects monthly magazine recency readership estimates far more seriously than those for weekly magazines. These averages conceal a wide range of variation and Table 8 in the Appendix shows that 21 of the 60 general monthly magazines have an A.I.R. r.p.c. estimate over twice as big as the maximum. It should be emphasised that the above calculations of the maximum readers are based on the optimistic assumption that all members (aged 16+) of a household are readers. Any realistic reduction of that parameter will reduce the household readers-per-copy and thus the maximum readers; the variations of the recency A.I.R. estimates from the maximum readerships are therefore likely to be greater in practice than those shown in the table above. That applies particularly to women's magazines, the results for which are based on all adults aged 16+ because it is not possible to calculate from the N.R.S. the average number of women in a household. If it is felt that every household contains at least one person who would not read any women's magazine, then we can re-calculate results for women's magazines, subtracting 1 from the household size in each case.

Table 2

Publication category	% seeing household copy	Est. * av. hshld size	Max. rdrs per copy	A.I.R. rdrs per copy	% variation
Av.Wom.Weekly (14)	56.2	1.44	2.5	3.9	54.6
Av.Wom.Fortnightly (2)	73.9	2.20	3.0	2.4	-
Av.Wom.Monthly (42)	50.5	1.44	3.2	6.7	113.8
Av.Wom.Bi-monthly (7)	51.8	1.51	3.0	6.8	128.7

* Subtracting 1 from the household size.

With the more realistic assumption that there is likely to be at least one (male?) member of a household who does not read a woman's magazine, the results above show the variation from the maximum readers-per-copy increasing with the publishing interval as before.

The sensitivity of the maximum possible readers-per-copy to the "household" readers-per-copy will now be apparent. The relationship can be expressed by means of the following formula, which is conceptually equivalent to the average speed calculation shown earlier:-

$$T = (100 \times H) / P$$

where
 T = maximum total readers-per-copy
 H = maximum household readers-per-copy
 P = percent of readers seeing a household copy

The following table shows the maximum limits of total readers-per-copy for various levels of household readers-per-copy and household readership percentages.

Table 3

Total readers-per-copy limits.

Average no. in household. (household rpc)	Percentage of readership seeing household copy							
	20	30	40	50	60	70	80	90
1.0	5.0	3.3	2.5	2.0	1.7	1.4	1.3	1.1
1.2	6.0	4.0	3.0	2.4	2.0	1.7	1.5	1.3
1.4	7.0	4.7	3.5	2.8	2.3	2.0	1.8	1.6
1.6	8.0	5.3	4.0	3.2	2.7	2.3	2.0	1.8
1.8	9.0	6.0	4.5	3.6	3.0	2.6	2.3	2.0
2.0	10.0	6.7	5.0	4.0	3.3	2.9	2.5	2.2
2.2	11.0	7.3	5.5	4.4	3.7	3.1	2.8	2.4
2.4	12.0	8.0	6.0	4.8	4.0	3.4	3.0	2.7
2.6	13.0	8.7	6.5	5.2	4.3	3.7	3.3	2.9
2.8	14.0	9.3	7.0	5.6	4.7	4.0	3.5	3.1
3.0	15.0	10.0	7.5	6.0	5.0	4.3	3.8	3.3
3.2	16.0	10.7	8.0	6.4	5.3	4.6	4.0	3.6
3.4	17.0	11.3	8.5	6.8	5.7	4.9	4.3	3.8

Example: If household average readers-per-copy = 2.4
 and percentage of readers seeing household copy = 60%
 then the total readers-per-copy cannot exceed 4.0

Note that the formula applies for any readerships or circulation. If 54% of a magazine's readership claim to have seen a household copy with a maximum potential of 2.5 readers-per-household, then the total readers-per-copy cannot exceed $(100 \times 2.5) / 54 = 4.63$. That is not a media research opinion; it is a mathematical fact.

We therefore have a firmly based mathematical method of validating the upper limit of average issue readership estimates. Moreover, the method is based on research which should be considerably more reliable and easier to collect than the readership data themselves. Source-of-copy data are sometimes criticised on the grounds that it is extremely difficult to remember exactly where a particular copy originated, particularly for out-of-home reading. That is a view which may have some validity but it is completely irrelevant in this case because we are not interested in the precise origin of a copy picked up outside the home. All we have to establish is whether the copy was a "household" copy or not and a moment's reflection will suggest that "source of copy" information, as defined in the simple terms applicable in this case, is likely to be considerably more robust and reliable than the average issue readership measure. Let me give an example.

In the last month, I have read, among other publications, two monthly magazines. "What Car" provides full details of every new motor car available in the U.K. and, as I am considering the purchase of a new car, I bought a copy some months ago (though I can't remember exactly when) and have read it on many occasions since. Because I read it so often, I am pretty sure that I have read it in the past 4 weeks and so would be counted under the "recent-reading" measure as an average issue reader. Because I have read the magazine over and over again during the past few months, my reading has been subject to serious replication and my last reading event might be subject to "telescoping", i.e. I might have mistakenly thought that it was within the last four weeks although it had really been earlier. However, in that rather hazy recollection of reading events, I am absolutely certain that (i) I bought the copy of the magazine (though I can't recall where) and (ii) it has never left my brief case since and nobody else has seen it.

The other magazine that I have read recently is "Motor Boat and Yachting". I think it was probably during the last four weeks (though again I may be "telescoping") but I certainly cannot be sure of precisely where or when. It might have been at the dentist's or in the doctor's waiting-room or where I had my hair cut or in the reception area of any one of several London advertising agencies. The one fact of which I am absolutely certain is that it was not a "household" copy that I saw. We do not subscribe to "Motor Boat and Yachting", my wife is not interested in boats and we certainly do not have a copy in the house.

In both of the above examples, the necessary "source of copy" data, to distinguish between a "household" copy or otherwise, is far more reliable and robust than the readership measure itself. A moment's thought about one's personal reading habits will confirm that it is far easier to state with certainty whether or not a magazine was a "household" copy than it is to say with accuracy when it was last read. This general experience is confirmed by a recent study carried out by R.S.L. to assess "quality of reading" measures. The research was described by Hilary Cade in a paper (ref. 7) presented to the 1993 International Research Symposium in San Francisco and repeated more recently in London at an M.R.G. evening meeting. Referring to the N.R.S. "source of copy" questions, it was stated:- "'Source of copy' was found to be understood and readily assessed by respondents" and "95% of claims for the 'source of copy' question were confirmed." In other words, source of copy data provide very reliable information and can safely be used to validate the readership claims.

Examining the other components of the equation, we have no ostensible reason to doubt the validity of the circulation figures and indeed it is difficult to imagine the circumstances in which these might be too low. Furthermore, whatever problems there might be in answering readership questions accurately, a respondent might reasonably be expected to know how many people there are in his or her household. Of the components of the calculations which lead us to the demonstrable inconsistencies described above, the recent-reading estimate is the most unreliable.

Accurate readership research is extremely difficult. It is beset by potential dangers:- the fallibility of human memory, the difficulties of quantifying human behaviour, confusion between similar titles, fatigue, and the problems of a respondent having to answer detailed questions about a very insignificant event in his or her life like a reading occasion several days or weeks ago. Whenever I think about a potential readership measurement technique, I therefore, first of all, apply the Shepherd-Smith test which is "If respondents had perfect memories and told the precise truth, would the method work?" The recent-reading technique demonstrably fails that test because of replication.

The detailed tables in the Appendix demonstrate the enormity of the problem by showing how far the recency estimates of readership for individual publications exceed the maximum in each case but, to highlight the discrepancies, here are the five monthlies with the greatest variation from the maximum.

Table 4 All adults aged 16+. NRS Jan-Dec 1992.

Monthly magazine	% seeing household copy	Av. hshld size	Max. rdrs per copy	A.I.R. rdrs per copy	% var.
WHAT BIKE	51.6	2.55	4.9	20.7	317.5
CLASSIC CARS	53.6	2.58	4.8	19.7	309.3
DO-IT-YOURSELF	65.6	2.30	3.5	12.7	262.4
PRACTICAL CARAVAN	73.1	2.28	3.1	10.1	223.7
CUSTOM CAR	48.8	2.73	5.6	17.9	219.5

For example, with 51.6% of the readers of "What Bike" seeing a household copy, it cannot have more than 4.9 readers-per-copy and yet the recency method attributes it with 20.7! Interestingly, all these magazines are designed for specialist reader groups and contain an enormous amount of information; they are the sort of magazines that are picked up and used for reference on numerous occasions. But a figure of around 20 readers-per-copy exceeds the bounds of all credibility. I suggest that what is happening in each case is rampant replication. Readers are picking up these magazines again and again and the recency method, which is incapable of distinguishing between one reader picking up a magazine on 12 occasions and 12 readers doing so once each, is inflating the average issue readership estimate accordingly. However, that is not necessarily true for all monthly magazines.

Table 5 All adults aged 16+. NRS Jan-Dec 1992.

Monthly magazine	% seeing household copy	Av. hshld size	Max. rdrs per copy	A.I.R. rdrs per copy	% var.
READERS DIGEST	57.0	2.38	4.2	3.8	-
SAGA MAGAZINE	75.1	1.96	2.6	2.0	-
CANDIS	81.0	2.54	3.1	2.1	-

For example, where a magazine has a high level of subscriptions, as in the three examples here, the recency method will not inflate the readership estimate to any great extent. When readers take a magazine regularly, and read it every month, they may well re-read previous issues from time to time but the failure of the recency method to detect the multiple pick-up will not inflate the readership estimate because the latest issue is being read anyway. Such magazines therefore pass the validity test, as you see, but may be placed at a disadvantage compared with competitive magazines with less regular readership and a correspondingly inflated readership estimate. Moreover, the added frequency of exposure provided by the multiple pickup, which could be of great value to an advertiser, cannot be measured by the recency method.

On the other hand, it could be argued that the recent-reading method is at least measuring some form of publication exposure and that the multiple pickup of monthly magazines, that causes the replication, is of value to a potential advertiser and should be taken into account. The trouble is that the recency method underestimates reading occasions; however many times a respondent picks up a magazine within an issue-period, he or she is only counted once. The Millward Brown research showed that, on average, readers of monthly magazines tended to pick up and read each magazine in two separate weeks of every 4-week period and even that research did not take account of multiple pickup within a week. What is needed is a measure of reading-days (such as a development of the information provided by the well thought-out but sadly under-used MPX research) to show advertisers the number of times magazines are picked up, yielding an opportunity for repeated advertisement

exposure on each occasion. In some countries, reading days are measured, although it is only recently that media planning systems have begun to use the data properly and, in particular, to take account of the time factor, but that is another subject.

Leaving aside the question of "reading-days", if the recency method of estimating average issue readership produces unacceptable distortions, then what method should be used? That is not an easy question. There have now been six International Readership Research Symposia, in which some of the brightest and most experienced media researchers in the world have put in months, if not years, of work and then come together for about a week on each occasion to share their experience and to try to solve the problems of readership research. It might be thought surprising therefore that the industry is still no nearer solving some of the most basic problems than it was at the time of the first Symposium in New Orleans in 1981. Nowhere has the battle raged more fiercely than over the basic technique to use for establishing average issue readership.

There are several main approaches. The two most widely-used methods have traditionally been "Recent reading" (or "Recency") and "Through-the-book". The war between the devotees of both these methods has been long and bloody; fanaticism on both sides has led to some thoroughly interesting and involving debates since the first Symposium in 1981. It is generally agreed by both camps that the "Recency" method tends to produce higher readership estimates, particularly for monthly magazines, than the "Through-the-book" method; the argument is about which is right. Critics of the "Recency" method, of whom you may have discerned that I am one, think that the "Recent reading" technique inevitably overestimates readership due to its inability to eliminate replication. "Through-the-book" consists of finding out whether respondents have read specific issues of a given publication. The "Recency supporters" have maintained that the "Through-the-book" method inevitably tends to underestimate readership, suggesting that, if too young an issue is used, then it does not have time to build up all its pass-on readership but, on the other hand, if it is too old, then the first readers tend to have forgotten that they have done so. There are also several practical difficulties associated with the method, mainly involving the problem of physically transporting copies of anything more than a few magazines to an interview and it would therefore be impractical to use it for the N.R.S. which measures over 200 publications.

One of the latest techniques, used particularly in the Netherlands, is the "first-read-yesterday" (F.R.Y.) method. It is a technique with which I personally have some sympathy, because it tends to avoid memory problems and, assuming that readers can accurately say that the reading occasion yesterday was indeed for the first time, then it removes the problem of replication. Critics of the method point out the need for a huge sample size to get reliable results for monthly publications, but developments in telephone interviewing techniques have made that less of a problem. More serious is the fact that while it can generate a probability of reading each publication for each respondent, it cannot measure duplication for weekly or monthly magazines. That is a pity, because duplication between publications is an important factor in schedule reach and frequency evaluations.

Another method of establishing average issue readership is to ask respondents how often they read a publication and then to use mathematics to calculate a probability but again that is not a direct measure of average issue readership. It also suffers from the same disadvantages as F.R.Y. does in dealing with duplication but has none of F.R.Y.'s benefits of recent recall.

Given that we need an accurate and unbiased method of estimating average issue readership without the distortions of replication, I must draw attention to the "First reading in the last publishing interval" method, developed by Michael Brown for use in the A.M.P.S. survey commissioned by the South African A.R.F. I suppose that could be abbreviated to "FRILPI", though I think that "FRIPi" sounds more cheerful. Anyway, the methodology was described in papers by Michael Brown (ref. 5) and Gert Yssel (ref. 6) at the Barcelona

Symposium, and all average issue readership in the A.M.P.S. survey is obtained from the use of a "first reading" question following the establishment of any reading within the issue-period. I have carried out the validation technique described above on the most recent available survey, for the period January - December 1991; the results are provided in Table 18 in the Appendix to this document. I analysed all weekly, fortnightly and monthly magazines for which I could obtain relevant readership estimates and audited circulation. It is interesting that, for every magazine except one, the readership estimate in each case passed the validation technique described above. The exception was a weekly magazine for farmers called "Landbouweekblad" where the A.I.R. estimate slightly exceeded the maximum. I have no idea why it should have been the only one to fail the validation test except that (i) its editorial content would make it difficult to distinguish one issue from another and (ii) it was suffering from falling circulation during the period of the survey. It is, I think, more important to note that, for all other publications, the use of the FRIPI methodology seems to have eliminated the replication problem and produced credible readership figures. Moreover it is not subject to the disadvantages of the "First-read-yesterday" method of being unable of needing a large sample and being unable to give readership duplication figures for any publications other than daily newspapers. Furthermore, it is not subject to the practical disadvantages of the "Through-the book" method of transporting large quantities of copies for surveys containing many titles.

The reason that the FRIPI methodology was developed is interesting. It was in response to a demand from the industry, including media owners, which at first sight looks a little puzzling. Why should media owners want lower readership figures? Well, the reason was that media planners considered the existing readership figures for magazines to be so incredible that they were tending to use their computers and press planning software to down-weight the readership of all magazines (the good with the bad) by a significant factor in each case. That was clearly not in the interests of magazines which were not badly affected by replication and so the demand become overwhelming, from publishers as well as agencies, for readership figures that everybody could accept.

Maybe, the same thing will happen here. There is certainly an overwhelming case for finding an alternative to the recent-reading method of establishing average issue readership. It measures "publishing interval reading occasions" which, if treated as an average issue measure, will overestimate the "readership" of magazines, particularly monthlies, at the expense of daily newspapers. On the other hand, "publishing interval reading occasions" will significantly underestimate reading days, to the detriment of monthly magazines.

Does it really matter? Well, yes it does. First of all, if the readership estimates for some publications are being distorted relative to others, that devalues the currency by which publications are bought and sold. But readership figures are not just a currency. If the readership estimates of individual magazines are artificially high, then so will be the reach estimates of schedules. If the coverage of a given schedule is not really the apparent 80% but in reality only 60%, then the effect on the target population will be much less than might have been expected. Econometric models, linking sales to advertising exposure, depend on accurate measurements of such exposure. If the sales effect of press advertising cannot be accurately predicted then increasingly cost-conscious advertisers will tend to transfer their advertising to other media, such as television, where the link between advertising and sales is more apparent. Finally, I hardly need to point out that if individual magazine readership is smaller, then it will take more insertions to achieve a given level of coverage and frequency, which could lead to larger press advertising budgets.

So yes, there is a serious problem and it matters a great deal. A reliable method of estimating average issue readership is desperately needed, which can be validated by the approach that I have described. I have suggested FRIPI to be well worth further investigation but the industry also needs an estimate of reading days, provided say by a development of the MPX approach. The recency method has had a good run, but surely it is now time to put the poor beast out of its misery.

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4. W. Langschmidt: "The effect of age of issue and origin of copy on readership results." R. R. Symposium: Montreal, 1983.
5. Michael Brown: "Developing and validating a method of 'First Reading'." R. R. Symposium: Barcelona, 1988.
6. Gert Yssel: "Changes to the methodology of estimating readership" Readership Research Symposium: Barcelona, 1988.
7. Hilary Cade: "Quality of reading measures assessed by qualitative research." R. R. Symposium: San Francisco, 1993.

APPENDIX

Analysis of individual magazines.

The following tables show, for all general and women's weekly, bi-monthly and quarterly magazines for which relevant data could be found, the maximum readers possible based on audited circulation figures, tabulated household size and the percentage of average issue readership claiming to have seen a "household" copy. Definitions are as follows:-

1. The analyses are based on the U.K. National Readership Survey for January-December 1992, using a universe of all adults aged 16+ rather than the more usual one of adults aged 15+. That was because it is not possible to establish from the N.R.S. the number of people aged 15+ in a household, and the average size of a household relative to the average issue readership is an essential ingredient of the calculations.
 2. The "Household readers %" column gives all adults aged 16+ claiming to have seen a "household" copy of a given magazine, expressed as a percentage of the total average issue readership aged 16+. A "household" copy is defined as one either "delivered to the informant's home" or "bought at a newsagent or news-stand by the informant or another member of the household" or was a "postal subscription delivered to the informant's home for the informant or another member of the household".
 3. The "A.I.R. household readership" is calculated by applying the "household readership percentage" (see 2) to the total adult 16+ A.I.R. (see 1).
 4. The "16+ adults per household" is the average size-of-household for all 16+ average issue readers of the given magazine.
 5. "Minimum household circulation in 000" is the A.I.R. household readership (see 3) divided by the average household size (see 4).
 6. "Circulation in 000" is the average audited circulation in thousands (A.B.C. wherever possible) for the period January-December 1992. Publications for which an audited January-December 1992 circulation could not be found, were excluded from the analysis.
 7. "Maximum readers in thousands" are calculated by multiplying the circulation in thousands (see 6) by the average household size (see 4), then dividing by the household readership percentage expressed as a fraction (see 2).
- For example, where circulation = 3,164,088, household readership percentage = 91.5%, and the average household size = 2.4986:-
- $$\text{Maximum readers (000)} = 3,164.088 \times 2.4986 \times 100 / 91.5 = 8,640.$$
8. "Maximum readers-per-copy" is found by dividing the maximum readers (see 7) by the circulation (see 6).
 9. "A.I.R. readers-per-copy" is found by dividing the N.R.S. 16+ A.I.R. estimate (see 1) by the circulation (see 6).
 10. "Percentage variation" shows the variation between the A.I.R. readers (see 1) and the maximum readers (see 7) expressed as a percentage of the maximum readers in each case. Where the A.I.R. readers do not exceed the maximum, no percentage variation is given. Publications are ranked within each group in descending order of percentage variation.

Table 6. General Weeklies All adults aged 16+ : 44,731,000

	AIR 16+ rdrs '000	Hhld rdrs %	AIR hhld rdrs '000	16+ adults per hhld	Min hhld circ '000	Circ '000	Max rdrs '000	16+ Max rpc	16+ AIR rpc	% var
EXCHANGE & MART	1639	62.6	1027	2.63	391	141	593	4.2	11.6	176.5
AMATEUR PHOTOGRAPHER	354	56.0	198	2.39	83	45	192	4.3	7.9	84.7
DALTONS WEEKLY	171	72.6	124	2.19	57	31	94	3.0	5.5	81.8
ANGLING TIMES	653	71.0	463	2.42	192	110	374	3.4	5.9	74.3
AMATEUR GARDENING	517	61.4	317	2.25	141	86	316	3.7	6.0	63.7
ANGLER'S MAIL	443	73.8	327	2.52	130	87	299	3.4	5.1	48.3
COUNTRY LIFE	458	29.1	133	2.35	57	39	316	8.1	11.7	45.0
AUTOCAR & MOTOR	544	55.9	304	2.59	117	82	379	4.6	6.7	43.8
KERRANG	243	74.1	180	3.03	59	43	175	4.1	5.7	39.0
TV TIMES	4932	75.8	3738	2.45	1526	1111	3592	3.2	4.4	37.3
AUTO EXPRESS	679	63.3	430	2.61	165	122	503	4.1	5.6	34.9
AUTOSPORT	292	52.3	153	2.54	60	46	222	4.9	6.4	31.6
TIME OUT	504	63.9	322	2.52	128	98	386	3.9	5.1	30.6
MOTORCYCLE NEWS	697	60.2	419	2.61	161	129	557	4.3	5.4	25.2
AUTO TRADER	1854	68.8	1276	2.76	463	382	1533	4.0	4.8	21.0
GARDEN NEWS	386	70.8	273	2.20	124	103	321	3.1	3.7	20.3
MELODY MAKER	370	58.7	217	3.01	72	62	316	5.1	6.0	16.9
RADIO TIMES	5558	79.1	4396	2.42	1815	1574	4822	3.1	3.5	15.3
HORSE & HOUND	342	64.9	222	2.50	89	77	297	3.8	4.4	15.1
SHOOTING TIMES & CM	168	61.0	103	2.45	42	37	149	4.0	4.5	13.0
NME	589	59.4	350	3.02	116	106	541	5.1	5.6	9.0
NEW SCIENTIST	402	40.0	161	2.46	65	68	417	6.1	5.9	-
SHOOT	456	68.1	311	2.92	107	128	546	4.3	3.6	-
MATCH	405	71.4	289	3.07	94	130	558	4.3	3.1	-
WHAT'S ON TV	2699	86.5	2335	2.32	1008	1417	3792	2.7	1.9	-
THE ECONOMIST	463	35.3	164	2.44	67	101	697	6.9	4.6	-
WEEKLY NEWS	978	64.2	628	2.36	266	436	1603	3.7	2.2	-
INVESTORS CHRONICLE	142	33.3	47	2.37	20	43	307	7.1	3.3	-
Average		61.9		2.55				4.4	5.4	22.6

Source: National Readership Survey (NRS Ltd.) January - December 1992.

Table 7. General fortnightlies All adults aged 16+ : 44,731,000

	AIR 16+ rdrs '000	Hhld rdrs %	AIR hhld rdrs '000	16+ adults per hhld	Min hhld circ '000	Circ '000	Max rdrs '000	16+ Max rpc	16+ AIR rpc	% var
RAW	192	68.2	131	3.16	41	25	117	4.6	7.6	63.5
PRIVATE EYE	816	57.9	472	2.41	196	197	821	4.2	4.1	-
SMASH HITS	1005	68.8	692	2.90	239	328	1381	4.2	3.1	-
BIG	334	77.5	259	2.95	88	254	965	3.8	1.3	-
Average		68.1		2.86				4.2	4.0	-

Source: National Readership Survey (NRS Ltd.) January - December 1992.

Table 8. General Monthlies All adults aged 16+ : 44,731,000

	AIR 16+ rdrs '000	Hhld rdrs %	AIR hhld rdrs '000	16+ adults per hhld	Min hhld '000	Circ '000	Max rdrs '000	16+ Max rpc	16+ AIR rpc	% var
WHAT BIKE	434	51.6	224	2.55	88	21	104	4.9	20.7	317.5
CLASSIC CARS	1163	53.6	624	2.58	241	59	284	4.8	19.7	309.3
DO-IT-YOURSELF	470	65.6	308	2.30	134	37	130	3.5	12.7	262.4
PRACTICAL CARAVAN	530	73.1	387	2.28	170	52	164	3.1	10.1	223.7
CUSTOM CAR	607	48.8	296	2.73	108	34	190	5.6	17.9	219.5
GOLF MONTHLY	1046	55.9	585	2.44	240	79	344	4.4	13.3	204.1
WHAT CAR	2070	52.1	1078	2.58	418	139	689	4.9	14.9	200.6
THE GARDENER	456	63.5	289	2.33	124	42	154	3.7	10.9	195.7
PERFORMANCE CAR	877	47.8	419	2.73	154	52	297	5.7	16.9	195.3
PRACTICAL GARDENING	1040	60.9	633	2.22	285	99	359	3.6	10.6	189.5
HI-FI NEWS & REC.REV.	252	56.3	142	2.39	59	22	95	4.2	11.3	165.9
YACHTING WORLD	208	44.3	92	2.27	41	16	82	5.1	13.0	153.0
PRACTICAL WOODWORKING	305	59.6	182	2.50	73	30	126	4.2	10.2	143.2
CLASSIC BIKE	472	53.3	251	2.58	97	42	202	4.8	11.3	133.7
STREET MACHINE	546	56.4	308	2.91	106	45	234	5.2	12.1	133.5
CLASSIC & SPORTSCAR	617	59.1	365	2.65	138	60	270	4.5	10.3	128.8
POPULAR CLASSICS	492	56.0	275	2.61	105	48	222	4.7	10.3	121.4
SUPERBIKE	397	53.4	212	2.61	81	38	185	4.9	10.5	114.4
WHAT HI-FI	630	54.9	346	2.57	135	63	296	4.7	9.9	112.7
SPORTING GUN	329	55.1	181	2.64	69	32	155	4.8	10.2	112.2
MOTORBOAT & YACHTING	179	53.2	95	2.39	40	19	87	4.5	9.3	107.1
BBC WILDLIFE	1143	56.3	643	2.38	271	140	592	4.2	8.2	93.1
GEOGRAPHICAL MAG	316	32.6	103	2.40	43	23	166	7.4	14.0	90.3
GOLF WORLD	667	55.2	368	2.47	149	81	364	4.5	8.2	83.2
SKY	1114	60.5	674	3.05	221	124	626	5.0	9.0	77.9
PRACTICAL HOUSEHOLDER	276	57.1	158	2.33	68	39	158	4.1	7.1	74.9
PERFORMANCE BIKES	579	59.1	342	2.73	125	72	331	4.6	8.1	74.7
PRACTICAL PHOTOGRAPHY	677	56.3	381	2.36	161	93	389	4.2	7.3	74.3
PRACTICAL CLASSICS	524	62.5	327	2.55	128	75	307	4.1	7.0	70.3
TROUT FISHERMAN	220	67.9	150	2.36	63	40	139	3.5	5.5	57.9
CAR	789	53.0	418	2.66	157	101	505	5.0	7.8	56.2
TROUT & SALMON	277	64.3	178	2.49	72	47	181	3.9	5.9	53.1
THE FIELD	344	27.1	93	2.25	41	27	229	8.3	12.5	50.4
CLASSIC CD	292	61.5	180	2.38	76	50	195	3.9	5.8	50.0
YACHTING MONTHLY	248	50.1	124	2.46	51	35	173	4.9	7.1	43.7
BIKE	341	66.3	226	2.57	88	62	241	3.9	5.5	41.7
CARS & CAR CONVRNS	380	61.0	232	2.94	79	59	286	4.8	6.4	33.0
PRACTICAL BOAT OWNER	277	58.4	162	2.45	66	51	215	4.2	5.4	28.8
SATELLITE TV EUROPE	1162	72.4	841	2.73	309	243	916	3.8	4.8	26.9
TODAY'S GOLFER	401	62.5	251	2.47	101	86	340	4.0	4.7	18.0
RUNNING MAGAZINE	192	67.4	130	2.55	51	43	164	3.8	4.4	17.0
THE FACE	398	54.7	218	3.18	69	60	348	5.8	6.7	14.5
SCOT'S MAGAZINE	304	48.3	147	2.19	67	63	285	4.5	4.8	6.5
GARDEN ANSWERS	391	68.3	267	2.24	119	122	401	3.3	3.2	-
GQ	353	51.3	181	2.50	72	76	368	4.9	4.7	-
Q MAGAZINE	629	62.4	392	2.83	139	149	677	4.5	4.2	-
READER'S DIGEST	5831	57.0	3321	2.38	1398	1520	6338	4.2	3.8	-
VOX	439	62.9	276	3.05	91	99	479	4.8	4.4	-
SELECT	305	66.4	202	3.09	65	73	338	4.7	4.2	-
THE GARDEN	366	70.0	256	2.13	120	149	453	3.0	2.5	-
PHOTO ANSWERS	169	68.8	116	2.53	46	59	219	3.7	2.8	-

Table 8. (contd.) General Monthlies All adults aged 16+ : 44,731,000

	AIR 16+ rdrs '000	Hhld rdrs %	AIR hhld rdrs '000	16+ adults per hhld	Min hhld circ '000	Circ '000	Max rdrs '000	16+ Max rpc	16+ AIR rpc	% var
SAGA MAGAZINE	990	75.1	744	1.96	380	503	1313	2.6	2.0	-
CHOICE	311	61.9	192	2.25	85	125	454	3.6	2.5	-
BBC GARDENERS WORLD	1656	32.2	533	2.24	238	350	2440	7.0	4.7	-
CANDIS	979	81.0	793	2.54	312	467	1466	3.1	2.1	-
MONEYWISE	204	62.9	128	2.17	59	96	331	3.5	2.1	-
EMPIRE	289	59.6	172	3.08	56	96	495	5.2	3.0	-
MANAGEMENT TODAY	398	27.0	107	2.32	46	86	742	8.6	4.6	-
KNAVE	326	18.5	60	2.49	24	59	796	13.5	5.5	-
FIESTA	663	27.0	179	2.57	70	206	1964	9.5	3.2	-
Average		56.4		2.52				4.8	8.0	67.3

Source: National Readership Survey (NRS Ltd.) January - December 1992.

Note on Table 8.

It is interesting that Reader's Digest, Saga Magazine and Candis, all of which have a high level of subscription copies and are therefore less likely to suffer from replication, all pass the validation test with A.I.R. readers-per-copy less than the maximum, in spite of having high household readership percentages.

It may also be thought significant that the two lowest percentage claims to have seen a household copy are associated with the "Men's interest" magazines "Fiesta" and "Knave". As these magazines are not normally regarded as standard office reading, it would probably be justified to regard these figures with a certain amount of scepticism though perhaps little surprise. To claim that the copy of the soft-porn magazine (that one just happened to have read) of course belonged to "somebody else", is quite understandable. There may also be a reflection here of a syndrome observed in connection with an associated activity that many men will admit to engaging in but few will admit to paying for!

Table 9. General Bi-monthlies All adults aged 16+ : 44,731,000

	AIR 16+ rdrs '000	Hhld rdrs %	AIR hhld rdrs '000	16+ adults per hhld	Min hhld circ '000	Circ '000	Max rdrs '000	16+ Max rpc	16+ AIR rpc	% var
THE COUNTRYMAN	454	42.5	193	2.34	83	54	296	5.5	8.4	53.2
VIZ	4178	57.8	2415	2.83	853	995	4875	4.9	4.2	-
ARENA	227	50.4	115	2.82	41	63	356	5.6	3.6	-
ILLUST. LONDON NEWS	129	23.3	30	2.21	14	29	271	9.5	4.5	-
EXPRESSION	610	70.0	427	2.36	181	627	2115	3.4	1.0	-
Average		48.8		2.51				5.8	4.3	-

Source: National Readership Survey (NRS Ltd.) January - December 1992.

Table 10. Women's weeklies All adults aged 16+ : 44,731,000

	AIR 16+ rdrs '000	Hhld rdrs '000	AIR hhld rdrs '000	16+ adults per hhld	Min hhld circ '000	Circ '000	Max rdrs '000	16+ Max rpc	16+ AIR rpc	% var
WOMAN'S OWN	3906	52.6	2055	2.38	862	685	3103	4.5	5.7	25.9
THE LADY	332	53.1	176	2.36	75	63	278	4.4	5.3	19.3
BEST	2712	59.6	1616	2.41	670	594	2405	4.0	4.6	12.8
WOMAN	2875	55.4	1592	2.34	680	685	2894	4.2	4.2	-
CHAT	1914	59.3	1135	2.43	467	478	1960	4.1	4.0	-
MY WEEKLY	1685	51.8	873	2.17	403	437	1826	4.2	3.9	-
WOMAN'S REALM	1605	47.5	763	2.16	354	391	1775	4.5	4.1	-
WOMAN'S WEEKLY	2767	51.9	1437	2.26	635	746	3253	4.4	3.7	-
PEOPLE'S FRIEND	1558	51.0	795	2.06	386	466	1883	4.0	3.3	-
HELLO	1674	52.3	875	2.41	363	449	2068	4.6	3.7	-
ME	1393	65.8	916	2.52	363	465	1783	3.8	3.0	-
JUST SEVENTEEN	731	66.2	484	3.07	158	206	953	4.6	3.6	-
JACKIE	175	54.7	96	2.52	38	54	247	4.6	3.3	-
MY GUY	151	65.7	100	3.00	33	57	261	4.6	2.7	-
Average		56.2		2.44				4.3	3.9	-

Source: National Readership Survey (NRS Ltd.) January - December 1992.

Table 11. Women's fortnightlies All adults aged 16+ : 44,731,000

	AIR 16+ rdrs '000	Hhld rdrs '000	AIR hhld rdrs '000	16+ adults per hhld	Min hhld circ '000	Circ '000	Max rdrs '000	16+ Max rpc	16+ AIR rpc	% var
MIZZ	373	73.5	274	3.17	86	148	639	4.3	2.5	-
MORE	641	74.4	477	3.22	148	292	1262	4.3	2.2	-
Average		73.9		3.20				4.3	2.4	-

Source: National Readership Survey (NRS Ltd.) January - December 1992.

Table 12. Women's Bi-monthlies All adults aged 16+ : 44,731,000

	AIR 16+ rdrs '000	Hhld rdrs '000	AIR hhld rdrs '000	16+ adults per hhld	Min hhld circ '000	Circ '000	Max rdrs '000	16+ Max rpc	16+ AIR rpc	% var
WEIGHT WATCHERS	1258	52.3	657	2.44	270	153	716	4.7	8.2	75.7
BRIDES & S.-U. HOME	515	46.2	238	2.54	94	60	329	5.5	8.6	56.7
HAIR	1187	42.2	501	2.49	201	140	824	5.9	8.5	44.0
WEDDING & HOME	348	43.4	151	2.62	58	42	252	6.0	8.3	37.9
ELLE DECORATION	215	50.9	110	2.33	47	37	170	4.6	5.8	26.6
SLIMMING	942	66.1	622	2.55	244	204	785	3.9	4.6	19.9
SLIMMER	441	61.5	271	2.59	105	120	502	4.2	3.7	-
Average		51.8		2.51				5.0	6.8	37.4

Source: National Readership Survey (NRS Ltd.) January - December 1992.

Table 13.

Women's Monthlies

All adults aged 16+ : 44,731,000

	AIR		AIR		16+		Min		Max	16+	16+	%
	16+	Hhld	hhld	adults	hhld	hhld	hhld	hhld				
	rdrs	rdrs	rdrs	per	circ	Circ	rdrs	Max	16+	16+		
	'000	%	'000	hhld	'000	'000	'000	'000	rpc	rpc	var	
TRUE ROMANCES	343	56.6	194	2.33	83	22	91	4.1	15.4	274.8		
LOVE STORY	177	68.5	121	2.49	49	15	56	3.6	11.5	217.4		
TRUE STORY	404	54.5	220	2.45	90	29	133	4.5	13.7	204.9		
HOUSE & GARDEN	1339	41.9	560	2.24	250	92	490	5.4	14.6	173.2		
HOMES & GARDENS	1941	42.0	815	2.20	370	168	883	5.2	11.5	119.8		
TRADITIONAL HOMES	236	45.5	107	2.25	48	22	111	5.0	10.5	112.6		
MOTHER & BABY	923	54.6	504	2.37	213	111	481	4.3	8.3	92.1		
HERE'S HEALTH	207	53.5	111	2.19	51	27	112	4.1	7.6	84.8		
VOGUE	1782	34.8	621	2.59	240	139	1032	7.4	12.8	72.7		
PRACTICAL PARENTING	821	64.4	528	2.25	235	136	476	3.5	6.0	72.5		
ANNABEL	553	35.8	198	2.22	89	55	339	6.2	10.1	63.0		
HAIR FLAIR	525	41.3	217	2.52	86	53	325	6.1	9.8	61.2		
IDEAL HOME	2028	44.9	911	2.29	399	248	1261	5.1	8.2	60.9		
CLOTHES SHOW MAG.	1433	57.8	828	2.81	294	184	898	4.9	7.8	59.5		
FAMILY CIRCLE	2247	58.0	1303	2.33	559	387	1553	4.0	5.8	44.6		
COUNTRY HOMES & INTRS	704	32.7	230	2.27	101	76	531	7.0	9.2	32.5		
GOOD HOUSEKEEPING	2437	49.9	1217	2.24	542	417	1876	4.5	5.8	29.9		
WORLD OF INTERIORS	241	40.6	98	2.12	46	37	192	5.2	6.5	25.3		
BBC GOOD FOOD	1994	76.7	1530	2.28	672	544	1615	3.0	3.7	23.5		
PARENTS	362	57.9	209	2.19	96	78	297	3.8	4.6	21.9		
COUNTRY LIVING	1021	44.4	453	2.32	195	163	851	5.2	6.3	20.0		
WOMAN & HOME	2107	45.6	962	2.20	436	403	1946	4.8	5.2	8.3		
PRIMA	2537	64.2	1629	2.34	695	695	2538	3.7	3.6	-		
LOVING	135	61.0	82	2.52	33	34	140	4.1	4.0	-		
COSMOPOLITAN	2297	47.5	1091	2.61	419	442	2424	5.5	5.2	-		
SHE	1258	50.1	630	2.44	258	273	1329	4.9	4.6	-		
ELLE	1001	45.9	460	2.68	172	183	1068	5.8	5.5	-		
LIVING	716	58.4	418	2.37	176	190	770	4.1	3.8	-		
WOMAN'S JOURNAL	646	43.1	279	2.19	127	141	714	5.1	4.6	-		
OPTIONS	620	47.6	295	2.37	124	139	693	5.0	4.5	-		
ESSENTIALS	1423	64.5	917	2.44	376	424	1605	3.8	3.4	-		
TATLER	366	29.2	107	2.31	46	55	431	7.9	6.7	-		
HOME & COUNTRY	508	32.9	167	2.17	77	90	598	6.6	5.6	-		
HARPERS & QUEEN	507	28.1	143	2.37	60	73	612	8.4	7.0	-		
HOUSE BEAUTIFUL	776	61.2	475	2.24	212	291	1068	3.7	2.7	-		
"19"	704	62.9	443	3.26	136	193	1000	5.2	3.7	-		
NEW WOMAN	654	61.2	400	2.45	163	249	1000	4.0	2.6	-		
MARIE CLAIRE	873	48.9	427	2.65	161	267	1445	5.4	3.3	-		
COMPANY	605	60.5	366	2.84	129	222	1042	4.7	2.7	-		
LOOKS	593	67.3	399	3.22	124	227	1087	4.8	2.6	-		
CATCH	249	72.8	182	3.35	54	101	464	4.6	2.5	-		
VANITY FAIR	417	12.5	52	2.64	20	42	893	21.2	9.9	-		
Average		50.5		2.44				5.4	6.7	25.9		

Source: National Readership Survey (NRS Ltd.) January - December 1992.

The above analyses for women's magazines are based on all adults aged 16+, because it is not possible to establish from the N.R.S. a figure for average number of women aged 16+ per household. In every household there may be at least one person who would not read any women's magazine and it would be more realistic to subtract 1 from the average size-of-household figure in each case. The following tables are based on that premise.

Table 14. Women's weeklies All adults aged 16+ : 44,731,000

	AIR		AIR * 16+		Min	Circ	Max	16+	16+	%
	16+	Hhld	hhld	adults						
	rdrs	rdrs	rdrs	per	hhld	'000	rdrs	Max	AIR	%
	'000	%	'000	hhld	'000	'000	'000	rpc	rpc	var
WOMAN'S OWN	3906	52.6	2055	1.38	1485	685	1801	2.6	5.7	116.9
THE LADY	332	53.1	176	1.36	130	63	160	2.6	5.3	107.3
BEST	2712	59.6	1616	1.41	1144	594	1408	2.4	4.6	92.6
WOMAN	2875	55.4	1592	1.34	1188	685	1658	2.4	4.2	73.4
MY WEEKLY	1685	51.8	873	1.17	748	437	983	2.3	3.9	71.3
WOMAN'S REALM	1605	47.5	763	1.16	659	391	953	2.4	4.1	68.5
CHAT	1914	59.3	1135	1.43	794	478	1154	2.4	4.0	65.9
PEOPLE'S FRIEND	1558	51.0	795	1.06	749	466	970	2.1	3.3	60.7
WOMAN'S WEEKLY	2767	51.9	1437	1.26	1137	746	1816	2.4	3.7	52.4
HELLO	1674	52.3	875	1.41	620	449	1210	2.7	3.7	38.3
ME	1393	65.8	916	1.52	602	465	1076	2.3	3.0	29.4
JACKIE	175	54.7	96	1.52	63	54	149	2.8	3.3	17.7
JUST SEVENTEEN	731	66.2	484	2.07	234	206	643	3.1	3.6	13.8
MY GUY	151	65.7	100	2.00	50	57	174	3.0	2.7	-
Average		56.2		1.44				2.5	3.9	54.6

Source: National Readership Survey (NRS Ltd.) January - December 1992.

Table 15. Women's fortnightlies All adults aged 16+ : 44,731,000

	AIR		AIR * 16+		Min	Circ	Max	16+	16+	%
	16+	Hhld	hhld	women						
	rdrs	rdrs	rdrs	per	hhld	'000	rdrs	Max	AIR	%
	'000	%	'000	hhld	'000	'000	'000	rpc	rpc	var
MIZZ	373	73.5	274	2.17	126	148	438	3.0	2.5	-
MORE	641	74.4	477	2.22	215	292	870	3.0	2.2	-
Average		73.9		2.20				3.0	2.4	-

Source: National Readership Survey (NRS Ltd.) January - December 1992.

Table 16. Women's Bi-monthlies All adults aged 16+ : 44,731,000

	AIR		AIR * 16+		Min	Circ	Max	16+	16+	%
	16+	Hhld	hhld	adults						
	rdrs	rdrs	rdrs	per	hhld	'000	rdrs	Max	AIR	%
	'000	%	'000	hhld	'000	'000	'000	rpc	rpc	var
WEIGHT WATCHERS	1258	52.3	657	1.44	457	153	422	2.8	8.2	198.0
BRIDES & S.-U. HOME	515	46.2	238	1.54	155	60	199	3.3	8.6	158.6
HAIR	1187	42.2	501	1.49	337	140	493	3.5	8.5	140.9
WEDDING & HOME	348	43.4	151	1.62	93	42	156	3.7	8.3	123.2
ELLE DECORATION	215	50.9	110	1.33	82	37	97	2.6	5.8	121.7
SLIMMING	942	66.1	622	1.55	402	204	477	2.3	4.6	97.3
SLIMMER	441	61.5	271	1.59	171	120	308	2.6	3.7	43.0
Average		51.8		1.51				3.0	6.8	128.7

Source: National Readership Survey (NRS Ltd.) January - December 1992.

* Average household size reduced by 1 in each case.

Table 17.

Women's Monthlies

All adults aged 16+ : 44,731,000

	AIR 16+ rdrs '000	Hhld rdrs %	AIR hhld rdrs '000	* 16+ adults per hhld	Min hhld circ '000	Circ '000	Max rdrs '000	16+ Max rpc	16+ AIR rpc	% var
TRUE ROMANCES	343	56.6	194	1.33	146	22	52	2.3	15.4	556.6
LOVE STORY	177	68.5	121	1.49	82	15	33	2.2	11.5	430.7
TRUE STORY	404	54.5	220	1.45	152	29	79	2.7	13.7	414.9
HOUSE & GARDEN	1339	41.9	560	1.24	452	92	271	3.0	14.6	393.6
HOMES & GARDENS	1941	42.0	815	1.20	678	168	482	2.9	11.5	302.8
TRADITIONAL HOMES	236	45.5	107	1.25	86	22	62	2.8	10.5	282.2
HERE'S HEALTH	207	53.5	111	1.19	93	27	61	2.2	7.6	240.2
MOTHER & BABY	923	54.6	504	1.37	368	111	278	2.5	8.3	232.1
PRACTICAL PARENTING	821	64.4	528	1.25	424	136	264	1.9	6.0	211.1
ANNABEL	553	35.8	198	1.22	162	55	186	3.4	10.1	196.5
IDEAL HOME	2028	44.9	911	1.29	709	248	709	2.9	8.2	186.0
VOGUE	1782	34.8	621	1.59	392	139	633	4.5	12.8	181.7
HAIR FLAIR	525	41.3	217	1.52	143	53	196	3.7	9.8	167.3
FAMILY CIRCLE	2247	58.0	1303	1.33	979	387	887	2.3	5.8	153.3
CLOTHES SHOW MAG.	1433	57.8	828	1.81	456	184	579	3.1	7.8	147.5
WORLD OF INTERIORS	241	40.6	98	1.12	87	37	102	2.8	6.5	137.0
COUNTRY HOMES & INTRS	704	32.7	230	1.27	180	76	298	3.9	9.2	136.5
GOOD HOUSEKEEPING	2437	49.9	1217	1.24	978	417	1040	2.5	5.8	134.4
PARENTS	362	57.9	209	1.19	176	78	161	2.1	4.6	124.3
BBC GOOD FOOD	1994	76.7	1530	1.28	1199	544	906	1.7	3.7	120.2
COUNTRY LIVING	1021	44.4	453	1.32	343	163	485	3.0	6.3	110.7
WOMAN & HOME	2107	45.6	962	1.20	799	403	1063	2.6	5.2	98.3
PRIMA	2537	64.2	1629	1.34	1212	695	1455	2.1	3.6	74.3
WOMAN'S JOURNAL	646	43.1	279	1.19	234	141	388	2.8	4.6	66.6
LIVING	716	58.4	418	1.37	304	190	446	2.4	3.8	60.6
LOVING	135	61.0	82	1.52	54	34	84	2.5	4.0	60.6
SHE	1258	50.1	630	1.44	437	273	785	2.9	4.6	60.3
HOME & COUNTRY	508	32.9	167	1.17	142	90	323	3.6	5.6	57.3
OPTIONS	620	47.6	295	1.37	215	139	401	2.9	4.5	54.6
COSMOPOLITAN	2297	47.5	1091	1.61	680	442	1494	3.4	5.2	53.8
ESSENTIALS	1423	64.5	917	1.44	637	424	947	2.2	3.4	50.2
TATLER	366	29.2	107	1.31	82	55	244	4.5	6.7	50.1
ELLE	1001	45.9	460	1.68	274	183	669	3.7	5.5	49.6
HARPERS & QUEEN	507	28.1	143	1.37	104	73	354	4.9	7.0	43.2
HOUSE BEAUTIFUL	776	61.2	475	1.24	382	291	592	2.0	2.7	31.0
NEW WOMAN	654	61.2	400	1.45	276	249	592	2.4	2.6	10.5
"19"	704	62.9	443	2.26	196	193	694	3.6	3.7	1.5
MARIE CLAIRE	873	48.9	427	1.65	258	267	901	3.4	3.3	-
COMPANY	605	60.5	366	1.84	199	222	675	3.0	2.7	-
LOOKS	593	67.3	399	2.22	180	227	749	3.3	2.6	-
CATCH	249	72.8	182	2.35	77	101	326	3.2	2.5	-
VANITY FAIR	417	12.5	52	1.64	32	42	554	13.1	9.9	-
Average		50.5		1.44				3.2	6.7	113.8

Source: National Readership Survey (NRS Ltd.) January - December 1992.

* Average household size reduced by 1 in each case.

Table 18. Analysis of South African A.M.P.S. Readership Survey.

W.C.A. adults. 6,405,000.

January-December 1991.

	AIR rdrs '000	Hhld rdrs %	AIR. hhld rdrs '000	Adults per hhld	Min. hhld circ '000	Circ '000	Max. rdrs '000	Max rpc	AIR rpc	% var
<u>Weekly magazines</u>										
HUISGENOOT	1899	79.1	1502	3.9	382	508	2528	5.0	3.7	-
SUNDAY TIMES MAG.	1329	86.3	1147	3.8	304	526	2299	4.4	2.5	-
RAPPORT TYDSKRIFT	1079	88.1	951	4.0	238	358	1620	4.5	3.0	-
YOU	758	71.5	542	3.8	144	207	1091	5.3	3.7	-
KEUR	598	69.9	418	4.5	93	119	766	6.4	5.0	-
PERSONALITY	463	65.8	305	3.4	91	113	574	5.1	4.1	-
LANDBOUWEEKBLAD	258	78.2	201	3.2	63	59	244	4.1	4.3	5.5
FINANCIAL MAIL	166	28.5	47	3.2	15	32	359	11.1	5.1	-
FINANSIES & TEGNIEK	98	47.9	47	3.5	13	18	133	7.4	5.5	-
FARMER'S WEEKLY	94	52.6	49	3.3	15	22	137	6.2	4.3	-
FINANCE WEEK	56	29.8	17	2.9	6	17	167	9.9	3.3	-
<u>Fortnightly magazines</u>										
SARIE	811	74.0	600	3.6	169	233	1123	4.8	3.5	-
FAIR LADY	647	58.8	381	3.5	107	162	978	6.0	4.0	-
ROOI ROSE	595	69.7	415	3.5	118	150	759	5.1	4.0	-
SCOPE	373	53.9	201	3.8	53	115	816	7.1	3.2	-
PEOPLE	205	64.9	133	4.1	32	75	476	6.3	2.7	-
<u>Monthly magazines</u>										
M-NET GUID	1065	82.1	875	3.8	228	541	2531	4.7	2.0	-
READER'S DIGEST	836	73.9	618	3.6	172	363	1766	4.9	2.3	-
CAR	529	67.5	357	3.8	94	137	769	5.6	3.9	-
GARDEN & HOME	520	71.7	373	3.3	113	144	662	4.6	3.6	-
YOUR FAMILY	494	79.4	392	3.8	103	210	1003	4.8	2.4	-
LIVING & LOVING	445	63.2	281	4.1	69	116	749	6.5	3.8	-
WOMAN'S VALUE	406	76.5	311	3.7	84	168	809	4.8	2.4	-
COSMOPOLITAN	367	60.5	222	3.4	64	107	612	5.7	3.4	-
FEMINA	167	64.8	109	3.4	32	107	561	5.2	1.6	-
STYLE	135	57.1	77	3.3	23	48	283	5.8	2.8	-
GETAWAY	113	74.1	84	3.5	24	53	254	4.8	2.1	-
DE KAT	102	47.6	48	3.4	14	18	127	7.2	5.8	-
BLUSH	33	66.9	22	4.6	5	19	128	6.9	1.8	-

Source: South African A.M.P.S. Survey. Jan-Dec 1991.