

FROM FRY TO FRIPI?

Costa Tchaoussoglou, SUMMO and Wim van der Noort, Inter/View International

Introduction

Our paper "Back to before Yesterday" (Berlin, 1995) announced the abandonment of the FRY-measurement and the probable comeback of the Recent Reading model for SummoScanner, the Dutch National Readership Survey.

For over 10 years the FRY method has been the trade mark of SummoScanner and Inter/View. In theory FRY may be the best measurement model. In practice however the disadvantages in applying the method were never satisfactorily solved.

This paper reports on developments and findings that led to an improved Recent Reading measurement based on FRIPI (*First Reading In the last Publishing Interval*). The paper will cover the following topics:

- *Why FRIPI?*
- *How is it measured?*
- *How valid is FRIPI?*
- *What difference does it make?*
- *Is FRIPI accepted as the new currency?*

Background

The background and developments that induced the change of measurement method in the SummoScanner were dealt with in the paper "The importance of being constant" (Berlin, 1995). The main problems with respect to the First time Read Yesterday-method (FRY) mentioned in short are: the necessity to group titles together for calculating reading probabilities (despite the large sample of n=32,000), the (sometimes necessary) correcting for reading probabilities above 1 and the instability of the first time read yesterday results.

The goals set by SUMMO related to the change of method were the following.

- Cost reduction and cost reallocation

Using a Recent Reading-method based on 'last time read' made it possible to reduce the sample size to n=24,000. This would free budget for new initiatives, e.g. research on media type choice.

- Stable AIR measurement

The stability of the AIR had to be guaranteed by a reduced and constant questionnaire with a maximum of 25 minutes.

- Reliable estimates of the *relative position* of magazines and newspapers.

It's not the absolute level of AIR that matters most, but the fairness and comparability between different media. This is the basic requirement for the evaluation of the new measurement method.

More validation on Recent Reading

Two years ago the CATI version of the Recent Reading model, developed for the SummoScanner, was presented (Berlin, 1995).

The time seemed ripe for a change, but as stated at that time: '*the decision to go 'back' to Recency will not be an easy one*'. For it were the weaknesses of the recent reading method (telescoping and replicated reading) that had given impetus to the development of FRY.

Having shown that the application of the recent reading model in the SummoScanner was feasible and wouldn't lead *in general* to a landslide in AIR levels, the following questions remained to be answered.

1. What will the effects be of a change in measurement method on the AIR of individual titles and how plausible are the outcomes in comparison to FRY?
2. To what extent are the results biased due to telescoping and replicated reading and does this affect the *relative position* of newspapers and magazines?
3. Is there a way to correct for possible overclaims, especially with regard to the *infrequent readers* of magazines?

To tackle these questions two research projects were undertaken .

Firstly a large *split run test* was carried out in the SummoScanner. From October 1995 onwards, the sample of the SummoScanner was split in two. Half of the respondents were interviewed with the FRY-method and the other half with the RR-method. This provided a good basis for comparing the actual results of both methods for each title measured in the SummoScanner.

In table 1 the results for different media types are presented.

Table 1 *Split run results SummoScanner 4th Quarter 1995*

Average Issue Reach (summed percentages)	FRY n=4000 %	Recent Reading n=4000 %	Index
RTV magazines	88	92	104
women's weeklies	96	98	103
other weeklies	121	123	101
monthlies (infrequent reading profile)	117	146	125
monthlies (frequent reading profile)	139	141	101

As can be seen, RR gives only a substantially higher AIR level than FRY for monthlies with a high proportion of infrequent readers (*infrequent reading profile*). This could be an indication that *telescoping* and *replicated reading* play an important role here. But it should also be mentioned that in the FRY-measurement the AIR for this group of monthly magazines was reduced by correcting reading probabilities above 1.

Secondly validation research was started, to find out how accurate the recent reading questions were answered. The small scale validation pilot especially focused on the infrequent readers, who with their seemingly high reading probabilities were the main suspects for possible inflation of recent reading.

The validation pilot consisted of observations of the telephone interview for 28 respondents in an experimental setting, followed by an in-depth-interview using the full Through The Book method, with the last 6 issues of each magazine.

This validation research confirmed that measurement errors in large scale media research are inevitable. Especially *last time read* and *reading frequency* show a tendency towards overclaim.

The recent reading question in the SummoScanner is operationalised in the following way:

Now I'm going to read out all of the magazines you have mentioned earlier. Can you tell me when was the last time you have read these magazines? You can choose from the following categories:

- yesterday
- less than 1 week/ 1 month ago
- 1 to 2 weeks/months ago
- longer ago

This question imposes a rather heavy claim on a person's memory. Overclaim due to telescoping does occur in recent reading. We found a net overclaim of 9%.

But underclaim does also occur. When respondents were confronted with magazines, which they had not mentioned in the preceding telephone interview, it sometimes became clear they had recently read them after all. These underclaims were rather well in balance with the overclaim.

More importantly, no indications were found that monthlies profit more from overclaim due to telescoping than weeklies.

So it was concluded, that correcting for *telescoping* is not necessary since it does not seem to induce imbalances in the comparison between magazines.

Replicated reading however, does seem to have an inflating effect on the AIR which is generally not counterbalanced by parallel reading, giving marked differences between titles. This was concluded from analysing the results of the *split run test* for each title.

Some titles seemed to gain much more from the model bias in the RR method than others. Especially those weeklies and monthlies that are infrequently read and tend to be kept and read during a longer period score much higher compared to FRY. This relates for instance to hobby magazines, magazines on home decoration, gardening etc. In table 2 some results are shown as an example of the differences.

Table 2 *FRY and Recent Reading compared; split run SummoScanner, 4th quarter 1995*

	<i>FRY</i>	<i>RR</i>	<i>Index</i>
Libelle (women's weekly)	24.7	26.5	107
Panorama (family weekly)	17.6	17.3	98
Elsevier (opinion weekly)	5.8	5.4	93
Doe Het Zelf (home decoration)	3.5	4.9	140
Tip Culinair (cooking recipies)	3.4	4.8	141
Knip (needle work)	5.9	8.7	147

Model bias of recent reading

The model bias in the recent reading model is well known and documented. The measurement model is based on the assumption that the number of readers in the past interval equals the number of readers of an average issue. This assumption evidently is not true. Replicated reading, i.e. reading an issue on more than one day, may cause overestimation. Parallel reading, i.e. reading more than one issue within the publishing interval, may cause underestimation.

There is no reason to expect that these over- and underestimation's are equally balanced for different titles. To illustrate this, it is important to differentiate between the reading behaviour of frequent and infrequent readers of a magazine.

If the true behaviour of a person is that he reads all issues of a newspaper or a magazine, replicated reading of an issue doesn't have a disturbing effect on the measurement with the RR model. If in fact an issue is usually picked up on more than one day, the reading behaviour implies that in an average interval both the newest and an older issue are read. In this case replicated and parallel reading do indeed compensate each other. Model failure for the 'true all issue reader' is only possible in one way, i.e. underestimation in all those cases where parallel reading is not compensated by replicated reading. For instance, those days one hadn't time to read the newspaper till the next day.

For infrequent readers of papers and magazines it's a different story. Here replicated reading poses a real problem for the measurement with the RR model. Let's illustrate this with an example. A person buys and reads a magazine on Wednesday and also reads it again in the weekend. If he doesn't buy the magazine in two consecutive weeks this implies an overestimation of 50%, since the period he can claim correctly to have read in the past interval is one and a half weeks.

Since such reading behaviour is far from atypical, to put it mildly, this overestimation should indeed worry us. Please note that it has nothing to do with overclaiming or failing memories. Even a perfect respondent and a perfect survey, without any measurement error, would give this overestimation.

This means that the RR-model seems especially biased in favour of magazines with lots of infrequent readers and more than one reading day.

This was the reason to turn to the **FRIFI method**, to correct for replicated reading.

FRIFI measurement

The FRIFI method was developed by Michael Brown for use in the A.M.P.S. survey in South Africa. The label FRIFI (instead of FRIPPI) was proposed by Neil Shepherd-Smith (San Francisco, 1993) who drew attention to this method since it passed his validation test of the Recent Reading method.

Instead of measuring the number of readers in the past interval, the FRIFI-model measures the number of readers who have read an issue in the past interval *for the first time*.

FRIFI looks attractive because like FRY it's based on a correct model and it does not have the disadvantages of the small number of yesterday observations, that causes instabilities in the FRY measurement.

The basic question to be answered was whether it can be measured by telephone in the SummoScanner without substantially increasing the interviewing time.

The FRIFI method developed for the SummoScanner is based on the premise that FRIFI need not to be measured for:

- subscribers
- magazines in reading circles
- frequent readers

For subscribers and frequent readers it is assumed that replicated and parallel reading cancel each other out. For magazines in the reading circle replicated reading is limited, since the magazines leave the home every week.

This filtering has both practical and theoretical advantages. It minimises the interview burden and correcting for replicated reading is restricted to those cases that are not likely to be compensated by parallel reading, as will normally be the case with frequent readers of a magazine.

After qualitative testing of the FRIPI questions, the following measurement procedure was implemented in the SummoScanner in July 1996:

If an issue is read in the last publication interval and was obtained as a single copy or other source of copy (pass along, out of home etc.) the following additional questions for that issue were immediately asked:

- was it the most recent issue or an older issue?
- if an older issue: was it read on an earlier occasion, i.e. longer than a week/ month ago?

The first question, whether it was the most recent issue, is meant as a first easy skip but also provides relevant mediaplanning information. The next question determines the *replicated reading*.

Since the frequency questions in the SummoScanner come after the recent reading questions, reading frequency is not used as a filter in the questionnaire. The selection of infrequent readers is done afterwards:

only infrequent readers (3 or less issues out of 6) who read in the past week an older issue they had also read before, do not contribute to AIR

In table 3 an overview is given of the results of FRIPI, based on the second half of 1996.

Table 3 FRIPI measurement, SummoScanner 1996, July-December

	Weeklies %	Monthlies %
Read in past interval	100.0	100.0
* single copy, other source of copy	57.0	73.0
* older issue	24.3	18.1
* read before	4.4	5.9
* read before, infrequent	3.2	4.7
Index FRIPI / RR	97	95

For weeklies 43% of the AIR is obtained via subscription or reading circle, leaving 57% for single copies and other sources of copy. The filter question *older issue* is passed by 24% of the past interval readers. Note that the reading circle is not included here. The age of the issues in the reading circle is asked separately.

Then 4.4% state that they have also read the magazine before the past interval. Leaving out the frequent readers afterwards, 3.2% remains.

So the average reduction on AIR in the FRIPI measurement is 3% for weeklies. For monthlies FRIPI results on average in 5% reduction.

Validation of FRIPI

In October 1996 a small validation study was carried out, to test whether the questions were well understood. During one week extra quality control questions were added to the SummoScanner whenever people claim to have read the issue before the last interval as well.

These control questions included the number of reading days, the place(s) where the issue was read and the reason why the issue was read on different occasions.

Based on a sample of n=97 the answers proved to be consistent in 90% of the cases. Replicated reading is most frequent for magazines read at home where the *life cycle* of an issue can be quite long. But also for out of home reading respondents gave plausible explanations for the replicated reading of an older issue.

The overall conclusion of this test was that the measurement of replicated reading was valid, i.e. based on questions that were well understood and providing plausible and consistent answers.

The extra interviewing time needed for measuring FRIPI is, on average, only 1 minute on a total length of 25 minutes.

Differentiation between titles

A main issue when judging FRIPI is whether it does indeed offer a better and more fair comparison between the AIR of magazines.

As stated above, we hypothesised that especially magazines with a long life cycle and a high proportion of infrequent readers would profit from the flaws in the RR model. As shown in table 2 the RR results of these magazines were significantly higher than the FRY results.

In table 4 we compare the results for the same titles, based on FRIPI.

Table 4 FRY, Recent Reading and FRIPI compared

	FRY	RR	FRIPI	Index FRIPI/ RR
Libelle (women's weekly)	24.7	26.5	25.9	98
Panorama (family weekly)	17.6	17.3	16.8	97
Elsevier (opinion weekly)	5.8	5.4	5.1	95
Doe Het Zelf (Home decoration)	3.5	4.9	4.5	91
Tip Culinair (cooking recipes)	3.4	4.8	4.3	90
Knip (needle work)	5.9	8.7	7.8	90

What we see from table 4 is that FRIPI does give a plausible correction on the AIR results from the last interval question. It differentiates between titles in the expected direction.

What also can be seen is that the differentiation added is rather restricted (a maximum of 10%) compared to the differences between FRY and RR (a maximum of 40%)

Conclusions

The Technical Committee of SUMMO recommended the implementation of FRIPI in the SummoScanner.

The method was judged as an improvement of the recent reading model because it:

- is objective and fair
- gives title specific corrections for replicated reading.

But the question was also raised whether FRIPI should be applied to newspapers too.

The measurement method for newspapers is the same in FRY and Recent Reading, i.e. based on yesterday reading and, therefore, newspapers were no focus of attention till then.

Since especially national newspapers have a fair proportion of irregular readers, the possible effects of replicated reading, for instance the supplements, could not be excluded beforehand.

A separate test showed that a FRIPI measurement for regional and local newspapers would hardly make any difference. For some of the national newspapers a reduction of a maximum of 2% could be expected.

The final decision

The Board of SUMMO had to decide: to FRIPI or not to FRIPI?

Despite the recommendation of the Technical Committee there were hesitations based on practical considerations.

On June 16th the board proposed to the annual General Meeting to implement Recent Reading without the additional corrections based on FRIPI.

The considerations for this proposal were:

- FRIPI does cost extra interviewing time and it only matters for relative few titles
- the differentiation FRIPI shows between titles is rather modest
- a simple, straightforward measurement, without 'difficult to explain' corrections, is to be preferred.

And so was decided.

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