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3.5 THE INFLUENCE ON CUMULATIVE COVERAGE FIGURES OF USING DIFFERENT TEMPORAL DEFINITIONS OF THE READERSHIP IN THE BROADEST SENSE

INTRODUCTION

This contribution continues with work and discussions that took place in New Orleans (1981) and Montreal (1983), dealing with the topic of magazine accumulation, growth of coverage, the coverage of one issue, two issues and so on up to *n* issues of a magazine.

The paper will be limited to addressing some thoughts to the respondent probability model. We prefer this model, because, on the one hand, it provides publishers and editorial staff with information for various groups about regular or less regular readers of a magazine, and, on the other, because it also enables us to make a variable qualitative evaluation of regular, occasional or sporadic readers. The objections that have been raised to this method, in particular by N Shepherd-Smith (1981), are, in our opinion, outweighed by the advantages. It is quite clear that the dispersion of the probability of contact within a frequency category is relatively small for sub-groups; in addition, these probabilities of contact must usually be determined separately anyway for sub-groups such as men and women, and in some cases even for more specific combinations of characteristics.

THE PROBLEM

In the Federal Republic of Germany, the generally recognised media investigations place great value on having a comparable definition, according to number of issues, of the broadest possible readership of all magazines, ie readers per year for monthlies, readers per three months for weeklies.

On an international level, this is apparently not always the case. Thus, in the United Kingdom, the National Readership Survey (NRS) restricted the question for monthlies to the last six months (six issues) and for weeklies to an average month (four issues).* (New Orleans Proceedings, 1981 p.500)

According to the NRS EML model, there is a uniform definition 'read or looked at in the past year' for all types of magazines. This approach produces results which are not comparable in a strict sense if what is being compared is the broadest possible readership of magazines with different publication intervals, their coverage or the demographic structure and accumulation of readerships.

METHOD

We investigated the influence of using different temporal definitions of the readership in the broadest sense on the coverage accumulation using a concrete example, the monthly *Reader's Digest* and its readership among the German population (14 and over) in the Federal Republic and West Berlin.

The source of our data is the Allensbach Multi-Media-Market Analysis of 1981 conducted by the Institut für Demoskopie Allensbach, in which 9,052 persons were interviewed using the quota method of selection.

FINDINGS

The more the readership in the broadest sense is restricted in temporal terms, the greater the proportion of regular readers will be. When the readership

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* Note: The response alternative 'less than 1x' strictly referring to publications appearing on a daily and weekly basis would seem to create additional problems when comparing publications with different publication intervals.

is limited to three months, we find, for example, 48.7% relatively regular readers of *Reader's Digest*; however, if the readership in the broadest sense is defined as including 'read or leaf through less than one issue a year' we find only 32.5%, and thus approximately one-third less regular readers. (Table 1)

The approach taken by the NRS model in ascertaining the reading frequency of monthlies for six issues while at the same time ascertaining the reading frequency of weekly publications for only four issues is bound to lead to a lesser proportion of regular readers for a monthly compared with a weekly, all other things being equal.

For purposes of calculating cumulative coverage figures, particular importance attaches to the structural composition according to regular, occasional and sporadic readers.

An increase in cumulative coverage figures, for example the coverage figures for 12 issues as compared with four issues, is essentially only produced by occasional and sporadic readers, by frequency categories with less likelihood of exposure, with a p <0.5 (Table 2).

The effects of different temporal definitions of readership on the cumulative coverage figures are not to be underestimated. *Reader's Digest* can

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TABLE 1
Frequency categories using different temporal definitions of readership
Monthly: *Reader's Digest*

| | in the broadest sense* (32.8%) n: 2,966 % | Readership using the definition of readers per - | | |
		year (29.7%) n: 2,692 %	six months (26.0%) n: 2,354 %	three months (19.9%) n:1,799 %
All adults				
Read regularly, ie all 12 issues a year	15.1	15.9	18.1	23.6
Read very frequently, although not all 12 issues	7.1	7.5	8.5	10.7
Read pretty often	10.3 ___ 32.5	10.7 ___ 34.1	11.9 ___ 38.5	14.4 ___ 48.7
Read now and then	31.7	32.7	34.9	34.6
Read very seldom, at most 1 or 2 issues a year	20.7	20.8	18.4	11.9
Read or look at less than one issue a year	15.1 ___ 35.8 100.0	12.4 ___ 33.2 100.0	8.2 ___ 26.6 100.0	4.8 ___ 16.7 100.0

*Persons who do not give a negative response (= 'Never read or look at') to the frequency question
Source: Allensbach Archives, IfD AWA '81 (n: 9,052)

serve as an example showing that the coverage of 12 issues amounts to 28.9% when the readership in the broadest sense is ascertained; when the time period is limited to six months, coverage is 25.2% and when the frequency categories are only applied to readers for three months, it amounts to only 20.0% (Table 3).

The shorter the time period for the group of persons who provide information about their reading habits, the less accumulation there will be: The readership of n magazines is estimated as being smaller than it actually is, while the average number of exposures to the magazines is over-estimated (Table 4).

Table 5 provides information about the changes in likelihood of exposure (p) for the different frequency categories, depending upon the particular temporal definition of readership. The briefer the temporal definition chosen for the frequency question, the greater the likelihood of exposure in the frequency category.

TABLE 2
An increase in cumulative coverage figures is determined by frequency categories with limited likelihood of exposure (p)

	Frequency categories with a likelihood of exposure (p) of -					
	.90	.70	.50	.30	.10	.05
% coverage n issues:						
1	90.0	70.0	50.0	30.0	10.0	5.0
2	99.0	91.0	75.0	51.0	19.0	9.8
3	99.9	97.3	87.5	65.7	27.1	14.3
4	100.0	99.2	93.8	72.9	34.4	18.6
5		99.8	96.9	77.9	41.0	22.5
6		100.0	98.4	81.4	46.9	26.2
7			99.2	83.9	52.2	29.7
8			99.6	85.6	57.0	33.0
9			99.8	86.8	61.3	36.2
10			99.9	87.7	65.2	39.2
11			100.0	88.3	68.7	42.0
12				88.7	71.8	44.7

Index:
Coverage for
12 issues
(4 issues = 100)

TABLE 3
Cumulative coverage figures using different temporal definitions of the readership
Monthly: Reader's Digest

	Readership			
	in the broadest sense*	using the definition of readers per -		
		year	six months	three months
All adults	(32.8%) n:2,966	(29.7%) n:2.692	(26.0%) n:2,354	(19.9%) n:1,799
	%	%	%	%
Coverage n issues:				
1	12.4	12.4	12.4	12.4
2	16.9	16.7	16.5	15.8
3	13.8	19.4	19.0	17.6
4	22.2	21.6	20.8	18.7
6	24.8	24.0	22.9	19.5
9	27.4	26.3	24.5	19.9
12	28.9	27.5	25.2	20.0

* Persons who do not give a negative response (= 'Never read or look at') to the frequency question

Source: Allensbach Archives, IfD AWA
'81 (n: 9,052)

TABLE 4
Cumulative coverage figures
using different temporal
definitions of the readership
Monthly: *Reader's Digest*
Indexed table:
coverage of one issue = 100

	Readership			
	in the broadest sense*	using the definition of readers per -		
		year	six months	three months
All adults	(32.8%) n:2,966	(29.7%) n:2.692	(26.0%) n:2,354	(19.9%) n:1,799

Coverage n issues:

2	136	135	133	127
4	179	174	168	151
6	200	194	185	157
9	221	212	198	160
12	233	222	203	161

Average number of exposures for 12 issues

5.1	5.4	5.9	7.5

* Persons who do not give a negative response (= 'Never read or look at') to the frequency question

Source: Allensbach Archives, IfD AWA '81 (n: 9,052).

CONCLUSIONS

When applying the respondent
probability model, some important
principles or rules need to be
observed.

- The frequency figures should be
determined for the readership in the
broadest sense.

- Frequency categories should be as
accurate as possible, particularly for
those with a limited likelihood of
exposure.

- Cumulative coverage figures are only
meaningful if they are limited to the
number of issues which appear in the
period defined:

For example, if the question is about
reading four issues of a magazines
which appears weekly, coverage figures
must be limited to one, two, three or,
at most, four issues;

If the question is about reading six
issues of monthlies, the coverage
figures must be limited to one, two,
three, four, five or a maximum of six
issues.

- The comparison of magazines using
different temporal definitions for the
frequency question must take the 'more
narrowly defined' readership as its
point of reference. In the previously
described example, the readership in
the broadest sense would only be able
to provide a correct comparison
between the coverage figures of four
issues of a monthly.

- Where different temporal definitions
are selected, they should be chosen so
as to cover the same number of issues
for all the different publication
intervals:

For example,

12 issues:	Frequency question for:
Weeklies	Readers in three months
Bi-weeklies	Readers in six months
Monthlies	Readers in twelve months
Bi-monthlies	Readers in two years

REFERENCES

Shepherd-Smith, N (1981) 'Respondent
probability models - a fatal flaw' (New
Orleans Proceedings).

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TABLE 5
Shorter temporal definition of readership leads to greater likelihood
of exposure (p)* in the different frequency categories
Monthly: *Reader's Digest*

| *All adults* | *in the broadest sense*** | *Readership using the definition of readers per -* | | |
		year	*six months*	*three months*
Likelihood of exposure (p) in the category:				
Read regularly, ie all 12 issues that appear in a year	.94	.98	.99	.99
Read very frequently, though not all 12 issues	.74	.78	.79	.82
Read pretty often	.57	.61	.62	.67
Read now and then	.27	.29	.31	.41
Read very seldom, at most 1 or 2 issues a year	.12	.14	.18	.36
Read or look at less than one issue a year	.07	.10	.17	.38

* Ascertained according to the proportion of readers in the publication interval, readers per issue (rpi) within the frequency category

** Persons who do not give a negative response (= 'Never read or look at') to the frequency question

Source: Allensbach Archives, IfD AWA '81 (n: 9,052)

The following information is available from the frequency question:

1. Please circle how frequently the respondent reads the magazines shown on the masthead cards.

A Read regularly, ie all 12 issues	B Read very frequently, though not all 12 issues	C Read pretty often	D Read now and then	E Read very seldom, at most 1 or 2 issues a year	F Read or look at less than one issue a year	G Never read or look at

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ATTENTION INTERVIEWER: put away all the masthead cards which were circled in column G; they will not be used any more. IF all the masthead cards were put in column G, skip to question 3! The other masthead cards from columns A to F will be presented again!

The recency question, which was posed for all the monthly magazines sorted into the columns A to F, read:

2. *INTERVIEWER* presents the *yellow masthead cards* from columns A to F again along with the *white sheet.* "Could you tell me now when you last read these magazines or looked at them, aside from today? Would you please distribute the cards on this sheet: Please put magazines you happen to have read in the last 14 days in the first column; magazines you looked at sometime in the last 15-30 days in the second column, etc." (Circle replies)

1. Within the last 14 days	2. 15-30 days ago	3. Within the last 3 months	4. Within the last 6 months	5. Within the last year	6. Longer ago

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