

4.6 Frequency of reading – Allensbach's point of view

SUMMARY

The art of posing frequency questions does not appear to be a central problem in media research because probabilities of use can only be reliably obtained by the adjustment of such statements through rpi values.

INTRODUCTION

We know from intensive interviews with respondents that the feeling of insecurity is even greater in answering a frequency question than it is for the recency question. It is well-known that any frequency response, even if it is in the form of numerical data, needs translation, transformation, adjustment by specific events.

We believe, therefore, that for the time being it is relatively unimportant to rack one's brains too much about the type of frequency questions and about how they are to be formulated.

First, a decision must be made about what is to be chosen, a scale question or a scale consisting of different questions that measure frequency in some form.

We favour the scale question, which is easy to use in the interview and is perfectly adequate for practical purposes.

In line with the findings of psychologists and information specialists, the categories of a frequency question should be limited to five or, at most, seven.

The question as to whether numerical or verbal categories are to be used, or a mixture of both, and whether they are to be put abstractly or with reference to the present, should be decided according to how well they can be differentiated. The probability of reading which is empirically measured should distinctly differentiate between the various classes and forms of the frequency question.

MEASURING READING FREQUENCY

We dealt with the problems of frequency questions in detail in 1970. (The article can be found in the methodological volume put out by the Arbeitsgemeinschaft Leseranlyse – the readership analysis work group – in 1971, pp 146 ff.) We repeat here the three requirements which the frequency question has to satisfy: (a) it is to produce distinctly discriminating categories of exposure probability, ie categories distributed as evenly as

possible over the whole range of possibilities from 'reading with high regularity' to 'non-reading', for instance: .95/.80/.65/.50/.35/.20/.05.

(b) within the frequency classes, the dispersion is to be as low as possible, ie frequency classes have to comprise people with effective reading behaviour patterns that are as similar as possible.

(c) the investigative method should allow for easy inclusion in the normal interviewing procedure; it should not burden the interview.

Even at that time we found that the ability of self-observation was overtaxed by scale questions on reading frequency with 10, 12 or 13 purely numerical items. They simulate an accuracy which the respondents' replies do not have. Certain figures are unjustly preferred or suppressed. In the LA '70, for instance, only 1% or less fell into the categories 11, nine or seven out of 12 issues.

One additional thought shows that it is practically Utopian to believe one could get the desired well-discriminated exposure probabilities by using 12 frequency categories. They would have to have a difference of 8% each, hence would look about like this: .98/.90/.82/.74/.66/.58/.50/.42/.34/.26/.18/.10/.02. In practice, considerable deficiencies show up.

'I read six out of the 12 issues' thus in no way means that in reality every second issue is read, but only something like every fourth one, or 'three out of 12'. These numbers must be taken into account accordingly when reading probabilities are totalled up to count cumulative coverages.

As early as 1969 we stated that verbal pre-choice questions on reading frequency produce a better approximation to frequency classes distributed evenly over the whole range. In Britain, the IPA Readership Survey rejected a verbal scale with the argument that the results were too dependent on the wording of the pre-choice alternatives and, furthermore, it had produced discrepancies between magazine groups, if compared with the results of numerical scales. In fact, the results for monthly magazines did not satisfy us either; there was a poor distribution between the frequency classes. However, we did not construe this as a peculiarity of verbal scales. Similar results appeared when a numerical scale was used (AWA, *experimente*, 1975).

For the 1973 AWA and those following we developed a frequency model which links elements of both the numerical and the verbal scale (Table 2).

In 1973 we did without a general filter question for the first time. Before the masthead cards were distributed,

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respondents were given information on the publication interval of the magazine, ie the time period in which 12 issues of a magazine of this category appear. The connection between the publication interval and the time span to be taken into account by their recollection was expressed in the sixth column of replies: 'Have not read or leafed through in the past . . . three, six or 12 months.'

The changeover to the verbal-numerical frequency model has proved worthwhile. With none of the previously used scales were we able to achieve a

comparably close approximation to the 'norm values', ie the gradated reading probabilities, that are bound to result from five equidistant intensity categories. **Table 3** contains the comparison of the findings for 1968, 1969 and 1973 according to the chi-squared test, in which the 'norm values' are related to the actual data. The smaller the differences, the lower the chi-squared value and with that the better the fit between the expected and effective measured reading probabilities.

The Allensbach verbal-numerical frequency scale

TABLE 1
Validity of numerical statements (lack of concordance between theoretical and empirical probabilities; using the example of weeklies)

<i>Reading 12 issues, according to their own statement</i>		<i>Theoretical proportion of readers per issue</i>	<i>Empirically ascertained proportion of readers per issue</i>	<i>The statement made by respondents should have read more precisely</i>
	%	%	%	
12	34	100.0	94.5	11 out of 12
11	x !	91.7	73.3	9 out of 12
10	3	83.3	60.4	7 out of 12
9	1 !	75.0	42.7	5 out of 12
8	3	66.7	40.1	5 out of 12
7	1 !	58.3	43.2*	5 out of 12
6	10	50.0	26.6	3 out of 12
5	4	41.7	21.0	2 out of 12
4	8	33.3	15.1	2 out of 12
3	12	25.0	10.7	1 out of 12
2	13	16.7	7.3	1 out of 12
1	10	8.3	8.4	1 out of 12
	99			

Source: LA '70 · Methodology volume

TABLE 2
Frequency questions in AWA

<i>1968 AWA numerical</i>	<i>1969/70 AWA verbal</i>	<i>1973/74 AWA verbal numerical</i>
9–10 out of 10 issues.	Read regularly, that is, every issue that appears.	Read regularly, that is, all 12 issues.
7–8 out of 10 issues.	Read very often, though not every single issue.	Read very often, though not all 12 issues.
5–6 out of 10 issues.	Read quite often.	Read quite often.
3–4 out of 10 issues.	Read from time to time.	Read from time to time.
1–2 out of 10 issues.	Read very rarely.	Read very rarely, 1 or 2 issues at most.
Less than 1 out of 10 issues.		

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shows no dramatic differences between magazine groups. The results for monthlies are also satisfactory (Table 4).

Different frequency frames for magazine groups with differing publication periods?

One should not lose sight of this problem. If different frames of reference for time are created in the frequency question for magazines with different publication

periods, ie the reading of four issues for weeklies, as opposed to six issues for monthlies, one must be aware that statements about weeklies are then consciously focused on a narrower, more regular readership and statements about monthlies are focused on a larger group including occasional readers.

The rule is: the shorter the definition period, the higher the proportion of regular readers, and the greater the filtering out of sporadic readers.

TABLE 3
Frequency investigation: advantages of the verbal-numerical scale as compared to the purely verbal and the purely numerical

1968 n = 1000 numerical scale.

1969 n = 8000 verbal scale.

1973 n = 8000 verbal-numerical scale.

Approximation text (χ^2): empirically ascertained p values and 'norm values' (even distances between the steps).

The smaller the χ^2 value, the better the goodness of fit (similarity).

Approximation to 'norm values'

	Verbal-numerical scale 1973	Verbal scale 1969 χ^2	Numerical scale 1968 χ^2
4 illustrated magazines	1.37	12.50	28.43
5 radio and TV guides	3.46	5.09	30.62
4 general interest weeklies	4.08	12.48	49.01
3 bi-weekly women's magazines	15.26	6.37	30.41
5 monthly women's magazines	18.44	64.12	53.02
6 other monthlies	22.36	32.29	71.14
	4 degrees of freedom	4 degrees of freedom	5 degrees of freedom*
	1969 and 1973 (of 12) p =	1968 (of 10) p =	
'Norm values'			
Read regularly – all 12	(.90)	9–10	(.89)
Read very often – not all	(.70)	7–8	(.72)
Read fairly frequently	(.50)	5–6	(.55)
Read from time to time	(.30)	3–4	(.38)
Read only very rarely–	(.10)	1–2	(.21)
1 or 2 issues		<1	(.05)

Source: AWA 1968, 1969, 1973

*The difference of five to four degrees of freedom only justifies a chi-squared value of approximately 20% higher.

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TABLE 4
Reading probabilities in the categories of a verbal-numerical frequency class

	<i>Read regularly, that is, all 12 issues</i>	<i>Read very often, but not all 12 issues</i>	<i>Read quite often</i>	<i>Read from time to time</i>	<i>Read very rarely, 1 or 2 issues at most</i>
	%	%	%	%	%
Illustrated news magazines Stern, Quick, Neue Revue, Bunte	92	71	47	28	13
Radio and TV guides Hörzu, TV, Gong, Funk Uhr)	94	64	44	23	8
General interest weeklies Wochend, Neue Post, Das Neue Blatt, Heim und Welt	91	60	44	23	11
Women's magazines and fashion magazines (bi-weeklies) Brigitte, Für Sie, Freundin	94	73	61	41	19
Women's magazines and fashion magazines (monthlies) Burda, Petra, Neue Mode, Chic, Madame	93	74	59	44	20
Special magazines (monthlies) Das Beste, Eltern, Schöner Wohnen, Zuhause, ADAC Motorwelt	94	78	65	44	20

Source: AWA 1973

TABLE 5
The shorter the time period, the higher the percentage of regular readers (Last read = 100%)

		<i>Proportion of regular readers ('read regularly, all 12 issues') of the magazine</i>	
		<i>Das Beste</i>	<i>Schöner Wohnen</i>
		%	%
1	In the last 2 weeks	59.9	35.2
1+2	In the last 15 to 30 days	39.0	20.0
1+2+3	In the last 3 months	25.2	10.4
1+2+3+4	In the last 6 months	19.3	7.7
1+2+3+4+5	In the last year	17.1	6.5

Source: Allensbach Archives, AWA '80

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TABLE 6
High correlations between frequency and recency categories

Product-moment correlation between the question about most recent reading or leafing through and the frequency question.

	<i>r</i>
Hör Zu	.95
Stern	.90
Für Sie	.89
Eltern	.90

Source: AWA 1970, Surveys III and IV; *n* = 3593

The correlation coefficients for the categories of the 'filter group' (readers during the past 12 months) are not quite as high at 0.6 to 0.8, but according to our experience, they are higher here than they are using other investigation forms.

FUTURE DIRECTIONS

At the present time, frequency investigations are an aid to acquiring cumulative data and to gathering information

TABLE 7
Unstable media exposure behaviour weekly illustrated magazine *Stern* (exposure probabilities recede from time t_0 to time t_1)

	Empirically ascertained exposure probabilities	
	1976 (t_0)	1977 (t_1)
	%	%
Regular readers	92.0	70.5
Very frequent readers	69.0	53.6
Rather frequent readers	57.5	36.3
Occasional readers	27.0	26.3
Quite infrequent readers	15.6	17.4

about the coverage figures and exposure when advertising is repeated in several issues of a magazine, and therefore they are sufficient.

But in our opinion, they cannot necessarily be used to determine the proportion of regular readers as opposed to non-regular readers of an issue. These values are liable to manipulation; they depend very much on which scale question or scale construction is applied. When the original frequency categories are modified and enlarged by means of segmentation, as is habitually done by the AG.MA, in our opinion, only those variables should be used which show a high correlation with the frequency

TABLE 8
Non-readers become readers, infrequent readers become regular readers, and vice versa – weekly illustrated magazine *Stern*

	Regular reader 1977 %	Very frequent reader 1977 %	Rather frequent reader 1977 %	Occasional reader 1977 %	Quite infrequent reader 1977 %	Non-reader 1977 %	Total 1976 %
1976							
Regular reader	5.07	0.45	0.63	0.63	0.10	1.09	7.97
Very frequent reader	1.08	1.37	1.72	1.81	0.09	1.54	7.61
Rather frequent reader	1.00	0.36	1.09	2.09	0.63	2.09	7.26
Occasional reader	0.73	1.27	2.54	9.34	3.54	7.80	25.22
Quite infrequent reader	0.09	0.54	0.73	2.72	1.99	3.81	9.88
Non-reader	0.73	1.00	1.81	5.08	2.63	30.81	42.06
Total 1977	8.70	4.99	8.52	21.67	8.98	47.14	100.00

Tables 7 and 8: Media panel, interviewed orally in 1976 and 1977. Allensbach Archives Nos: 3028/29 and 3042 (*n*: 1103)

An example of how the table should be read:

42.06% of all adults were not among the widest group of *Stern* readers in 1976. Approximately every fourth member of the group, 11.25% exactly, had become *Stern* readers in 1977, however.

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TABLE 9
Fluctuation in media noting

	Readers per issue 1976 and/or 1977 = 100		
	Lost %	Faithful %	Added %
4 illustrated news magazines	35.7	29.5	34.8
6 TV and radio guides	36.4	33.4	30.2
11 weekly women's magazines	43.3	22.8	33.9
4 bi-weekly women's magazines	38.5	27.4	34.1
8 monthly women's magazines	44.3	20.3	35.4
2 parent's magazines	42.3	25.6	32.1
2 young people's magazines	40.3	17.1	42.6
2 general interest weeklies	37.4	25.6	37.0
5 magazines dealing with society, politics and economics	45.3	23.8	30.9
2 weekly magazines	37.8	26.7	35.5
2 football magazines	35.8	19.1	45.1
5 bi-weekly auto and hobby magazines	44.9	22.1	33.0
5 bi-weekly auto and sports magazines	44.8	23.3	31.9
4 house and garden magazines	46.9	21.0	32.1
7 monthly magazines on specific subjects	47.7	15.2	37.1
Regional subscription newspaper	10.9	77.9	11.2
Bildzeitung	29.4	34.5	36.1
Regional commercial newspaper	39.7	24.6	35.6
Movies per week	47.8	7.4	44.8

Source: Allensbach Media Panel, interviewed orally in 1976 and 1977 (n = 1103)

question itself.

Once we have solved more urgent problems, we will have to turn our attention to the validation of cumulated readership data.

It looks as if we could only achieve this through panel research, in particular, through orally questioned panel waves.

Not least of all it is the instability of media habits that will force us to do this. The two tables 7 and 8 give a rough idea of the changes we will have to reckon with in the course of time.

Fewer extreme U distributions seem to correspond to reality than tended to be assumed in the past, with a great bloc of regular readers on the one hand, and a great bloc of occasional readers on the other.

Further results of the 1976/77 Allensbach Media Panel were presented at the last ESOMAR Congress in Monte-Carlo (Hansen, 1980). The instability of media noting in the different media groups – as documented in Table 9 – might be of special interest in this context.

In view of these fluctuation rates it seems expedient to focus further research on making reading or exposure probabilities per respondent available for at least a second time by repeated surveys perhaps three or six months later.

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