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5.3 Media quality measurements in national media surveys

A couple of years ago the question was again raised in Germany whether media research and media planning should require criteria indicating advertising effectiveness as a media qualification, in addition to criteria like audience profile, purchase potential, penetration, cpm etc, as existing (more or less) in current National Media Survey systems. The problem is not at all new, but because of stagnating or even reduced advertising budgets the question whether the advertising message really reaches the target group, and to what extent in relation to the financial input, is of growing importance and thus needs an answer as far as possible.

Today's usual briefing for media planning reads, simplified: 'The ad message must get through as fast as possible. What is therefore needed is a large number of OTS (ie exposure), at low cost, in a short period of time.'

The essential criterion for media selection, therefore, is the number of OTS (of exposure) or more precisely the number of probable chances of contacts between medium and target group in relation to the necessary insertion cost.

In other words we assume that maximising the number of OTS (exposure) between medium and target group directly leads to an increase of advertising effectiveness.

This paper raises the question whether or not this assumption is right, and what means can help to bring media planning closer to reality.

Based on the accepted research techniques of measuring OTS (exposure) the current planning formula looks like this: 'Number of readers within the target group multiplied by reading probabilities equals the number of opportunities to see the magazine, equals the number of opportunities to see the advertisement.'

We assume that each advertisement in every issue of a magazine, for example, has the same chance to be read or looked at as the magazine itself. Thus it follows that every reader must read or flick through the respective magazine, issue for issue read, page by page, at one single time.

We all know that this situation is an exception, and not the general case that we take for granted in everyday media planning. Comparing what we really are measuring in our national media surveys, ie the chance of media or vehicle exposure, to what the real process of reading from chance of vehicle exposure to ad unit effect may look like (as shown in **Figure 1**). We have to admit that we totally neglect what really causes magazines to differ not only by reach, publication term and rates of insertion but mainly by how their content is read or flicked through, which may differ for every issue.

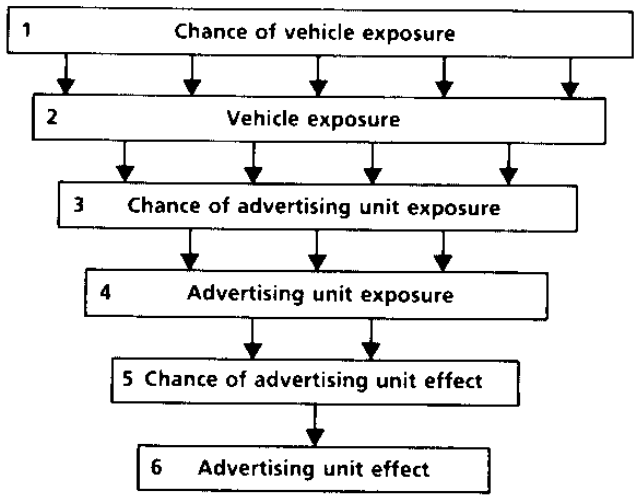
Maximising the chances of vehicle exposures, therefore, risks leading to enormous budget wastage, either by overdoing it in the target group or by reaching the wrong persons through false assumptions about the real value of the vehicle in terms of how it is actually used.

We, therefore, dare to state that the current planning formula and the OTS exposure calculation are incorrect, and that we thus have to look for validated indicators measuring the process subsequent to the chance of vehicle exposure if media research and media planning are really to cope with their task of selecting those advertising vehicles where the advertisement has the highest chance of being noticed by the target group, within given budget limits.

The recent planning formula and OTS calculation is incorrect because: (**a**), not only the number of different issues read but also additionally the number of pick-ups per issue reflect the real number of OTS in terms of the magazine itself; and (**b**), because of the different ways readers handle and read different magazines, the OTS of an advertisement cannot have the same probability as those of a magazine.

As a conclusion to what we have tried to point out

FIGURE 1
The process of reading and advertisement value



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regarding where we actually are and where we should go, here once more are the three main criticisms of present national media research and media planning. These, in our opinion, cannot satisfy anybody except those vehicles which believe that they could lose probability indicators by qualitative ad exposure:

(**a**) reach and frequency measurements in recent national media surveys assume that an average reader picks up a magazine only once per publication period.

(**b**) picking up a magazine only once per publication period means that an average reader finishes reading 100% of the magazine in one reading session, thus making the chance of advertising unit exposure equal the chance of vehicle exposure.

(**c**) the assumption 'chance of advertising unit exposure equals chance of vehicle exposure' leads to a planning standard of maximising the chances of vehicle exposures in order to optimise the chance of advertising value.

In order to demonstrate that our conclusions are no mere assumptions, here is one media planning example based on the recent planning formula 'OTS magazine equals OTS advertising unit', the results of which we shall compare with the results of a new and recently published survey of *Das Beste aus Reader's Digest*, named 'Qualitäten' (Qualities). The aim of this survey was to try to find out whether or not, and to what extent, one current planning formula copes with the actual output, and whether or not one can find a simple, measurable indicator for the real reading process of magazines.

In this case we are looking for a magazine with the highest affinity to our target group, 'men, 14 to 29 years, with above-average education'. Three magazines, A, B and C, are to be compared according to their target group affinities. As the indices based on the audience profiles given by the German National Media Survey AG.MA clearly show in **Figure 2**, only titles A and C fit our requirements.

In the next stage the preselected titles A and C are compared in terms of their penetration within the given target group, in order to find out which would provide the highest reach and, therefore, the highest number of chances of vehicle exposures with the target group.

Figure 3 shows that title A is in total far ahead of title C, and that title C could only compete with title A if its insertion rates were at least 40% lower than those of title A. Because this is not the case, we would certainly have chosen title A as our basic advertising vehicle.

But is it really correct to do so? According to the findings about the number of actual vehicle exposures and advertisement unit exposures after one insertion based on the results of the survey 'Qualitäten', the answer must be 'no'.

Contrary to one assumption on the base of the results of AG.MA, **Figure 4** clearly shows that most of our

FIGURE 2
Title preselection according to target group affinities

	*Socio-demographic main points of readerships**			
	Population index	*Title A index*	*Title B index*	*Title C index*
Men	100	113	109	126
Women	100	89	92	78
14–29 years	100	121	118	129
30–49 years	100	109	118	109
50 years and older	100	76	71	71
Primary education with/ without apprenticeship	100	72	100	51
Secondary education without graduation	100	144	112	144
High school diploma/ university/college	100	170	70	310
Target group	Men 14–29 years above average education			

* *converted data from AG.MA '80.*

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FIGURE 3
Title preselection according to penetration in the target group

	*Penetration comparison in socio-demographic groups**	
	Title A index	*Title C index*
Men	100	64
14–29 years	100	61
High school diploma/ university/college	100	106

* *converted data from AG.MA '80.*

chances of vehicle exposures lead to advertisement unit exposures among persons not belonging to the target group, ie older people, with a lower educational level than required! And our assumption 'OTS magazine equals OTS advertising unit' is right in only 12% of all cases. The actual number of vehicle exposures within the publication interval of title A explains why young men with above-average education tend to read or flick through title A rapidly and selectively, and thus the average advertisement has a lower chance of being noticed than assumed by the number of chances of vehicle exposures.

Keeping in mind that only 12% of all the readers reached by title A have a chance of an advertisement unit exposure of 1.0 and more, the budget wastage after having chosen title A becomes even more obvious when looking at the figures shown in **Figure 5**.

Only 38% of these 12% with a chance of advertising unit exposure of 1.0+ belong to people of the age group 14–29 years; only 51% of these 12% to men; and only 51% of them to people with a better education! The possible assumption that one only needs more frequency with title A to increase the number of advertisement unit exposures obviously involves a high risk.

Our recent quantitative media study obliges us to believe that the chance of vehicle exposure leading directly to an advertisement unit effect can only be assumed by neglecting the fact that the real process of reading of magazines, for example, looks much more complicated and less uniform than we would like it to be.

FIGURE 4
Reading behaviour of socio-demographic groups within the readership of an average issue* – Title A

		Vehicle exposure			*Advertising unit exposure*		
	Total audience	*1*	*2–3*	*4+*	*to 0.5*	*0.5–1.0*	*1.0+*
	100%	*41%*	*35%*	*24%*	*45%*	*43%*	*12%*
	Index	*Index*	*Index*	*Index*	*Index*	*Index*	*Index*
Men	100	94	104	106	94	106	102
Women	100	106	96	94	106	94	98
14–29 years	100	100	106	77	94	97	123
30–49 years	100	97	94	119	92	114	75
50 years and older	100	103	100	100	115	88	106
Primary education with/ without apprenticeship	100	103	103	84	108	94	79
Secondary education without graduation	100	100	93	111	81	111	137
High school diploma/ university/college	100	82	100	164	91	109	127

* *special evaluation from* Das Beste *'Qualitäten', 1980.*

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FIGURE 5
Reading behaviour of socio-demographic groups within the readership*

		Vehicle exposure			*Advertising unit exposure*		
	Total audience	*1*	*2–3*	*4+*	*to 0.5*	*0.5–1.0*	*1.0+*
N	*1590*	*657*	*557*	*376*	*716*	*684*	*190*
	100%	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*
Men	50	47	52	53	47	53	51
Women	50	53	48	47	53	47	49
14–29 years	31	31	33	24	29	30	38
30–49 years	36	35	34	43	33	41	27
50 years and older	33	34	33	33	38	29	35
Primary education with/ without apprenticeship	62	64	64	52	67	58	49
Secondary education without graduation	27	27	25	30	22	30	37
High school diploma/ university/college	11	9	11	18	10	12	14

* *special evaluation from* Das Beste *'Qualitäten', 1980.*

This is simply because our questioning procedure, as used in AG.MA, allows only for one maximum vehicle exposure per reader within a publication interval, and on the base of this leads to the further assumption that magazines differ only by their number of readers gathered through one to 12 issues and their publication interval.

The question is whether or not people select their magazines in respect to the publication period or in regards to the editorial contents: **Figure 6** is relevant to this.

What did the research technique of 'Qualitäten' look like?

Based on a *net* representative sample of 974 individuals 14 years and older, the questioning procedure ran over three stages from January 1979 to June 1979, with almost identical interviewees. Phase I was a verbal personal interview measuring reach and frequency of magazines, in exactly the way our German National Media Analysis (AG.MA) does. At the end of this interview the interviewees were asked to participate in a three-month panel operation, ie Phase II, by keeping a diary with daily recordings of their personal magazine reading behaviour (the diary questionnaire is shown in **Figure 7**). In order to avoid influences from Phase I on Phase II, as well as to minimise the so-called 'panel effect', there was a short time break between Phases I and II, and additionally the data from the diaries of the first week of Phase II were subsequently excluded from the calculation of the final results, as were those of the last week of Phase II.

Parallel to Phase II the institute analysed every issue of the main magazines (ie, those with a reasonable audience size) which appeared during the period of Phase II. 12 consecutive issues of weeklies, six of fortnightlies and three of monthlies were looked through page by page, and data about number of advertising pages, positioning, brand advertised and type of advertisement were then stored on a computer tape. This was done to permit later comparison between diary input and magazine issue content regarding the OTS, exposure, of advertisements.

After Phase II a verbal personal interview with the identical persons of Phases I and II took place in Phase III, in order to obtain information about the nature of their relationship towards the magazines read or flicked through during the period of Phase II.

As can be seen from **Figure 7**, each panelist had to write day by day:

(**a**) the name of the magazine.
(**b**) the identification of the specific issue.
(**c**) the place of reading.
(**d**) the individual pages read or looked at, advertisements included, when read or flicked through.

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FIGURE 6
The current research result

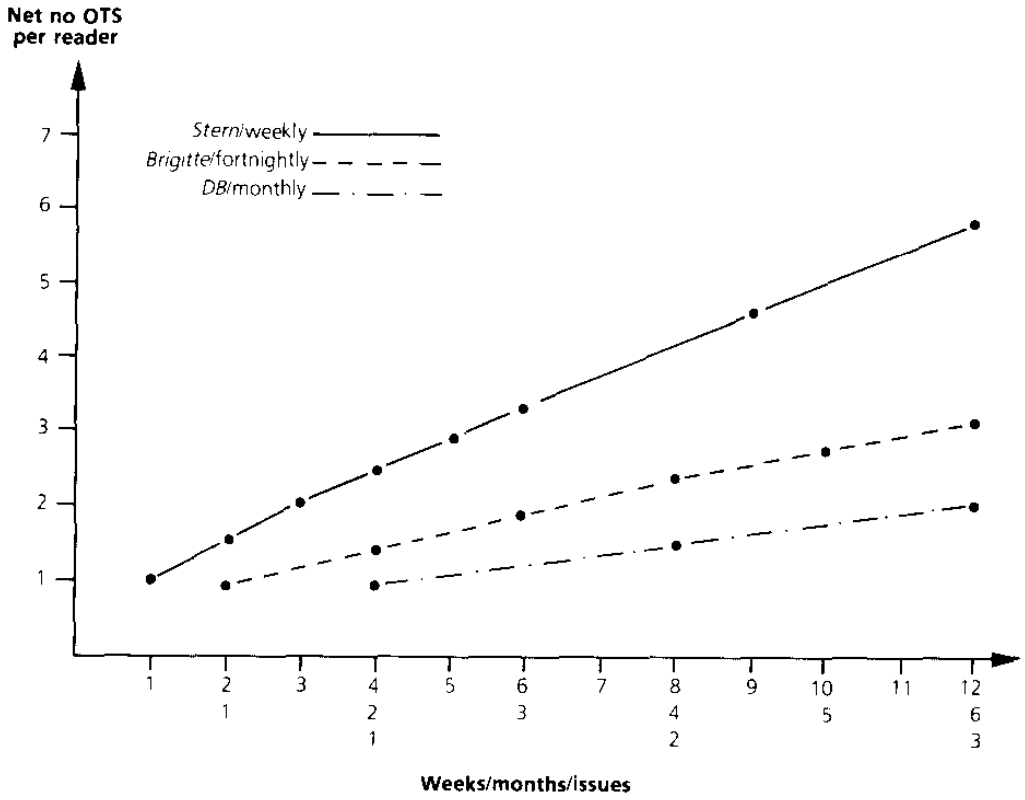

FIGURE 7
Sample diary page

Attn: Make sure date is recorded correctly → Day: Monday Date: 3/19/1979

Please write down the name of the magazine(s) every time you pick up a magazine today	Please write down the exact issue of the magazine(s) picked up this time	Please write down where read after picking up of magazine(s)		Please write down which pages were read or flicked through when reading this time	Please write down the minutes spent reading this time	Please write down how you obtained the issue read or flicked through this time					Please write down whether Lesezirkel or not	
		at home	outside of home			Subscribed within my household	Bought by myself	Bought by other family member	Received as gift or borrowed from friend/ colleague	Found by chance outside home	yes	no
↓	↓			↓	↓							

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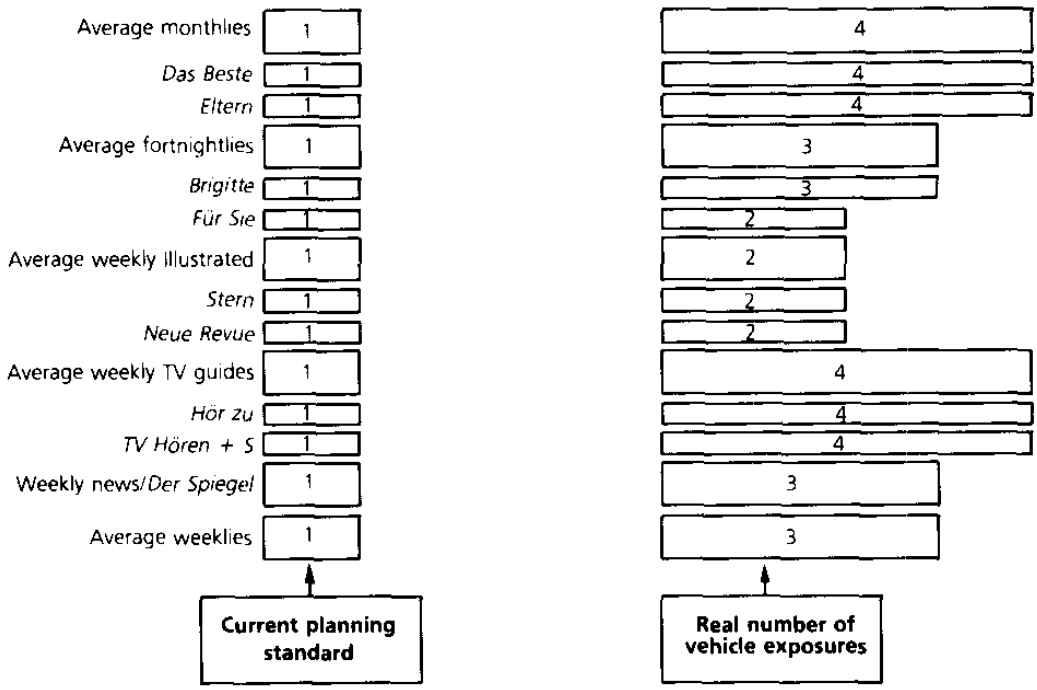
FIGURE 8
The real number of vehicle exposures per publication interval



(**e**) the estimate of time spent reading or flicking through.
(**f**) the way the respective issue was obtained.

The essential of this diary is point (**d**) in connection with points (**a**) and (**b**). The interviewees were told to note every pick-up of a magazine per day, so that as much information as possible could be gathered about the actual handling of a series of issues. The critical point was whether or not the panelist would actually be able or willing to write which pages of the content he came in contact with while reading or flicking through an issue.

The following results will show to what extent this experiment led to plausible results.

As **Figure 8** shows, when comparing the current standard of planning (ie the assumption that every reader picks up any issue of every magazine only once per publication period) with the results of what the panelists reported as their actual number of pick-ups on an average over ten weeks, it becomes obvious that this assumption is far away from reality: magazines differ not only by publication term but, because of their function and content, by their actual number of vehicle exposures.

Thus it follows that one can assume this indication of how intensively and thoroughly a magazine is read or flicked through to have an influence on the probability of an advertisement's being noticed. It cannot be the same as the probability of vehicle exposure. In other words, we have to admit that the assumption used in current models of media research and media planning (ie only one pick-up per publication interval, regardless of the type of magazine) does not correspond to reality at all.

The next step in validating the actual magazine handling was to try to find out about the probability or chance of advertising unit exposure in relation to the chance of vehicle exposure as a result of the actual number of vehicle exposures as demonstrated before. The results are shown in **Figure 9**.

The decisive data come from a combination of the answers in the diary (**Figure 7**) to columns 1, 2 and 4 from left to right, after a plausibility control of the notings by means of the Institute's parallel independent content analysis as previously described.

From the results shown in **Figure 9** it is obvious that the second assumption of today's media planning, that the chance of advertising unit exposure is equal to the chance of vehicle exposure, does not correspond at all to reality. This is true not only because the number of vehicle exposures differs individually from magazine to magazine instead of being fixed at a maximum of 1.0 per publication

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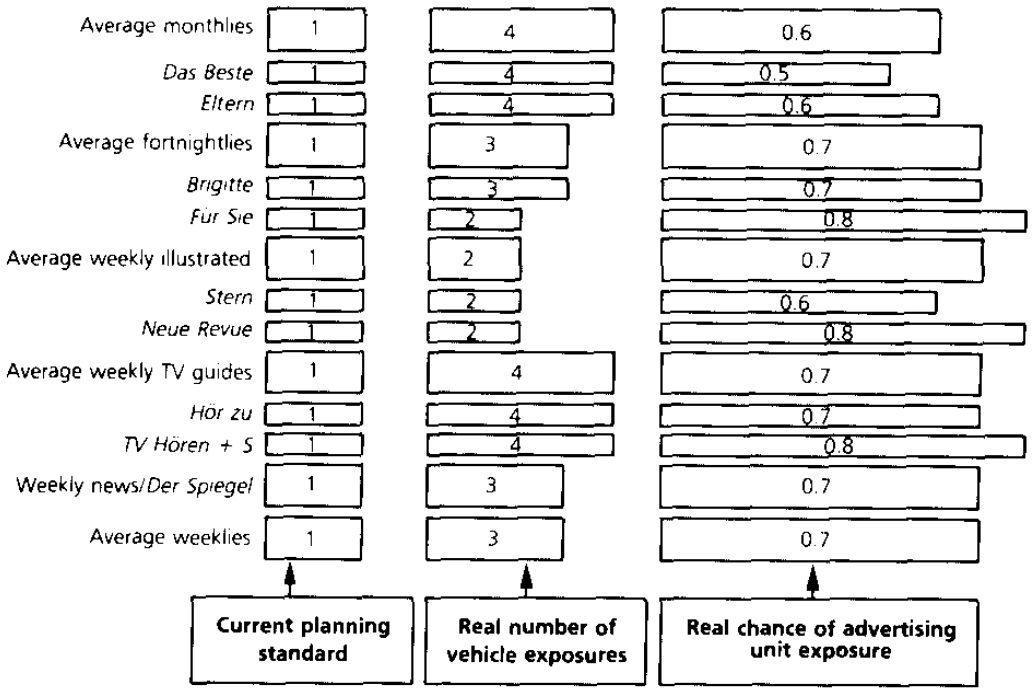
FIGURE 9
Number of vehicle exposures and chance of advertising unit exposure per publication interval



period, but also because the individual handling of the magazines leads to a situation where even the actual number of vehicle exposures is no measure for predicting the probability that an average advertisement will be noticed (ie be 'exposed'). Thus it follows that the number of pick-ups, ie the actual number of vehicle exposures compared to former theories, is no direct indicator of the actual chance of advertising unit exposure, but only a description of how selectively and fast a magazine is read or flicked through. Comparison between *Stern* and *Neue Revue*, for example, indicates that, based on the same number of vehicle exposures, fast flicking through the whole content of *Neue Revue* leads to a higher numeric advertising unit exposure probability of 0.8 than *Stern* with 0.5. This is because *Stern* is obviously read more than flicked through. And the actual chance of advertising unit exposure is much lower than we guess, due to the finding that every magazine is read individually, not only at one time per average issue.

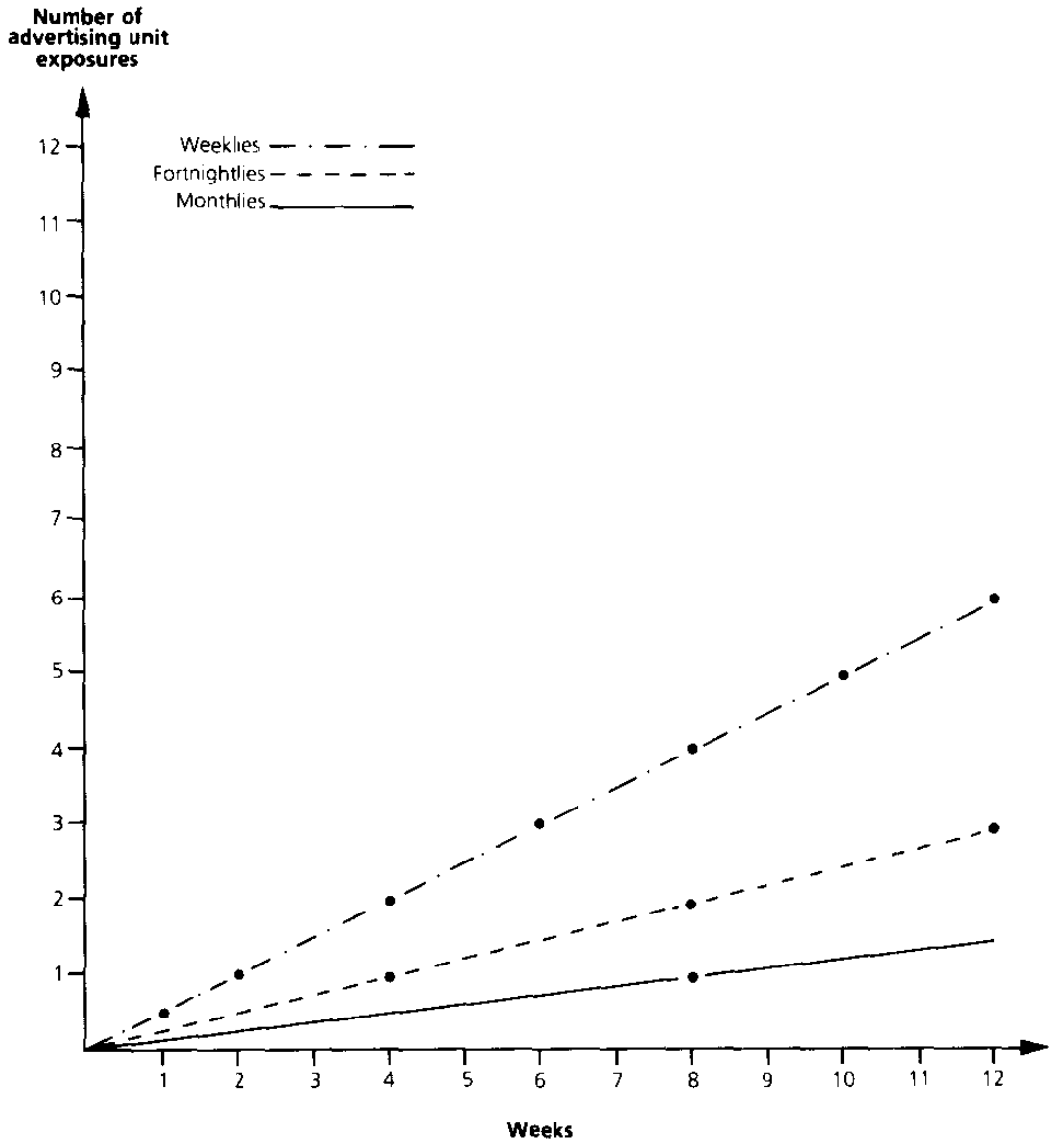
Planning with the given standards of vehicle exposure probabilities, therefore, must obviously bear the enormous risk of budget wastage, as we have seen at the beginning of our case study.

To demonstrate only what the margin of error based on our current planning standards looks like, the recent NMS research result in terms of vehicle and advertising unit exposure shown in **Figure 6** may be compared with the more realistic picture of **Figure 10**. There is no doubt that we should delete another of today's assumptions, that weeklies and fortnightlies lead much faster to advertising unit exposure than do monthlies. And this is because magazines are obviously handled differently from the way our current research models want them to be handled.

Our conclusions may sound provocative, but correspond to the findings of 'Qualitäten'. We have to admit that this survey was planned and executed as a pilot survey, in order to learn more about what actually happens when it comes to reading magazines and advertising effects. Nothing is perfect, not even in media research, and nobody will ever be able to measure 'reality'. In this respect, however, we assume that these results bring us at least one step forward to more knowledge, and maybe even to more precision in media research and media planning. These conclusions are:

(**a**) that the assumption of current media planning, 'the number of vehicle exposures equals the number of advertising unit exposures', is *wrong*.

FIGURE 10
The real number of advertising unit exposures



(**b**) that, contrary to current media planning assumptions, no magazine can guarantee that every advertisement published in one issue is exposed to its total audience within its publication interval.
(**c**) that the real chance of advertising unit exposure demonstrates that weeklies do not operate as fast as assumed, and monthlies operate faster than assumed.

Looking at some of the overloaded current national media surveys, it would be unrealistic to ask for question procedures such as those of Phase II of our survey 'Qualitäten', to be integrated into the existing models, in order to obtain and provide advertising exposure probability data as presented. But we finally should admit the discrepancy between what we are measuring in our current NMS, ie the chance of vehicle exposure, and what media planning actually is looking for, ie optimising the

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FIGURE 11

Question
"You say your relationship with any person is either a close one or a distant one, even one of total dislike. You can say the same of magazines."

Here is a metric scale from 1m to 10m. Take 1m to be very close, 10m to be very distant. Please indicate for each magazine read or flicked through within the last three months how close or distant from you each of these magazines is.

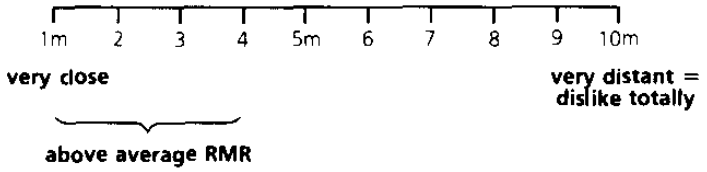

FIGURE 12
The correlation between the reader–magazine relationship, reading magazine and advertising unit exposure*

	Readers with below average RMR‡			*Readers with above average RMR†*		
	Ø *monthly index*	Ø *biweekly index*	Ø *weekly index*	Ø *monthly index*	Ø *biweekly index*	Ø *weekly index*
Ø vehicle exposure per issue	100	100	100	167	100	200
1–3 vehicle exposures	100	100	100	57	90	75
4–5 vehicle exposures	100	100	100	267	157	170
6+ vehicle exposures	100	100	100	300	100	244

* *special evaluation from* Das Beste *'Qualitäten' 1980.*
† *readers who recorded a distance of 1–4m to the title read (RMR max = 1m).*
‡ *readers who recorded a distance of 5–10m to the title read (RMR min = 10m).*

advertising unit exposure probability. The simple formula '1 OTS magazine equals 1 OTS advertising unit' has too often been proved to be wrong because it totally neglected the qualitative, ie the individual handling, aspects of magazines. We, therefore, should look for measures which may easily be added to or, better, be integrated into our existing NMS models. We guess that this is better than to continue discussions whether or not and how to improve precision of reach and frequency as the only aim for the perfection of quantitative media research!

In the case of obvious mistakes in the recent NMS models, however, there is no doubt about necessary improvements. To the question: 'which qualitative measurement can predict the actual reading of magazines and thus the chance of advertising unit exposure . . .,' one should add, '. . . and could be easily integrated into any NMS?'

With 'Qualitäten' we tried to find and validate a simple reader-magazine relationship question with a metric distance scale, which we asked in Phase III of our survey – the personal verbal post-interview with the respondents of Phases I and II. The question and metric scale are shown in **Figure 11**.

The question itself obviously has much similarity with the question about one's favourite magazine in the American magazine-Q-model, for example, or the question about how much one would miss a magazine if it

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were no longer published, as lately used and revalidated in the 'Zuwendungsindex' (RMR index) of Gruner + Jahr in Germany. There is no doubt that more sophisticated models to measure RMR have been designed within the last ten years, but none of these are simple enough for inclusion in the current NMS model.

Validating our simple RMR question with regard to the actual number of vehicle exposures on the base of the Phase II results of 'Qualitäten' proves a positive correlation between respondents having a 1–4m distance to a magazine (ie, having above average RMR) and the number of actual vehicle exposures, as can be seen in **Figure 12**. The only discrepancy found, with fortnightlies, indicates in our opinion that possibly the question is too weak for fortnightlies.

But more important is the finding that there is a positive correlation between above average RMR as measured in our case and advertising unit exposure

FIGURE 13
The correlation between the reader–magazine relationship, reading magazine and advertising unit exposure*

	Readers with below average RMR‡			*Readers with above average RMR†*		
	Ø monthly index	*Ø biweekly index*	*Ø weekly index*	*Ø monthly index*	*Ø biweekly index*	*Ø weekly index*
Ø advertising unit exposure per issue	100	100	100	120	114	117
To 0.5 ad unit exposures	100	100	100	92	111	87
0.5–1.0 ad unit exposures	100	100	100	97	77	93
1.0+ ad unit exposures	100	100	100	164	141	191

* *special evaluation from* Das Beste *'Qualitäten' 1980.*
† *readers who recorded a distance of 1–4m to the title read (RMR max = 1m).*
‡ *readers who recorded a distance of 5–10m to the title read (RMR min = 10m).*

FIGURE 14
Results for title A

	Audience men total*		*Audience men* above average RMR*	
Title A	*%*	*Index*	*%*	*Index*
14–29 years	34	100	37	109
30–49 years	37	100	47	127
50 years and older	29	100	16	55
Primary education with/ without apprenticeship	47	100	53	113
Secondary education without graduation	36	100	35	97
High school diploma/ university/college	17	100	12	71

* *audience = read/flicked through at least 1 out of 12 issues.*

probability, as shown in **Figure 13**.

The results indicate that the closer the psychological distance between reader and magazine, the higher the probability of advertising unit exposure.

Thus it follows that even a simple question regarding the degree of RMR is able to indicate, ie to predict, the actual handling and reading of magazines and, therefore, the chance of advertising unit exposure.

In order to improve the accuracy or, rather, the precision of today's media planning in its natural aim of placing the advertisement where it has the best chance to be exposed to the target group as soon as possible, all NMS should include qualitative measurements of this or some other kind, validated and capable of being included.

But there is no doubt that frequency as measured today can no longer be the only 'qualitative' measurement of advertising vehicle and advertising unit exposure probability.

In order to prove the correctness of what we have said before, let us come back to our case study with magazine A. **Figure 5**, and especially **Figure 14**, clearly show on the base of the results for title A as given in our 'Qualitäten' survey that if our NMS had been able to provide data about who were the readers of title A having an above average RMR, one obviously would not have selected this title as choice number one, because it would have been possible to predict that most of the advertising unit exposures would occur among readers not belonging to the target group!

We conclude that media quality and media qualification, in relation to current practice in NMS media research and media planning, is not only a question of reach and frequency as measured in our current NMS models, but a question of the actual reading and the chance of advertising unit exposure. Therefore progress in media research and media planning cannot in our view do without the inclusion in our NMS of measurements to predict what actually happens to an advertising vehicle as well as to the advertising unit itself when published. The most sophisticated measurement does not always prove to be the best in practice.