### CONFUSION CONTROL: SOME THEORETICAL CONSIDERATIONS

INTRODUCTION	Success of treatment			
Confusion control is a method used to correct readership values which are	<i>7,</i> 64.	%		
measured by 'Through-the-Book' (TTB).	* -··· F · · · · · · · · · · · ·	60 20		
A matched sample of respondents was interviewed with respect to an issue they could not have read, an advance	Difference	40 (to be checked for		

A matched sample of respondents was interviewed with respect to an issue they could not have read, an advance issue, and the proportion claiming to have read this issue was subtracted from those claiming to have read the published issue.

## Hypothetical example:

	Claimed readership				
	%		%		
Published issue Advanced issue	30 - 3	=	100 10		
Audience estimate	27		90		

### The argument is:

If 3% of respondents say they read an issue which they could not actually have read, then 3% of the sample for the published issue are really non-readers although they claimed to be readers.

At first glance this is convincing. One would like to determine the number of people who falsely claimed to be readers of the published issue. With the advance issue one finds such people exactly: proven non-readers who claimed to be readers.

This is all very similar to the so-called placebo test in medical research.

Two comparable test groups are given in one case a placebo and in the other an active agent.

The difference in the change of health between the two samples definitely results from the drug, as this is the only difference between the two groups: The difference in coverage between the published and advanced issues can correspondingly be traced to the reading of the published issue which occurred in the meantime.

significance)

## QUOTED COUNTER-EXAMPLES

The strongest objections to confusion control have not come from theory. Empirical results have shown that there must be something wrong with the confusion control calculation.

Friedrich W R Tennstädt and Jochen Hansen reported in New Orleans in 1981 on the following example (p 116):

## TV Hören and Sehen

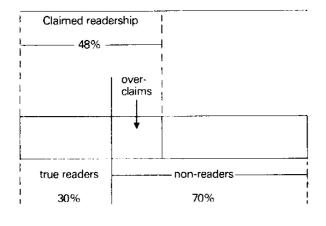
	Claimed readership	%	
Published copy Advance copy	4,982,000 4,742,000	100 95	
Audience estimate	240,000	5	

According to this, 95% of established coverage of a published issue should have been cancelled - a radical proposal, and for the authors a proof that the simple subtraction method must be wrong.

#### THEORETICAL BACKGROUND

In order to understand better how confusion control actually does work, it is supposed that the true readership is known. (Figure 1)

## FIGURE 1



= Interview response: "Have read this issue"

48% of respondents say that they have read the published issue. The true readership, however amounts to 30%. According to this example all true readers say that they have read the issue. Some of the non-readers gave incorrect answers and these overclaims were subtracted in the confusion control method through a questioning device. Thus, claimed readership overclaims = correct coverage.

## THE ASSUMPTIONS OF CONFUSION CONTROL

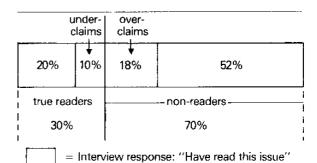
## First assumption: Underclaims do not exist

This simple example clearly illustrates the first supposition made by confusion control. At the time of the interview, not a single true reader is allowed to forget that he read the issue. Confusion control always subtracts something and never adds anything for non-reported reading, the underclaims of the true readers.

#### Figure 2 is more realistic

If this example corresponds better with reality, but confusion control nevertheless always subtracts overclaims and does not compensate for

#### FIGURE 2



underclaims, then the calculated coverage will certainly fall below the true readership level of 30%.

### **Underclaims**

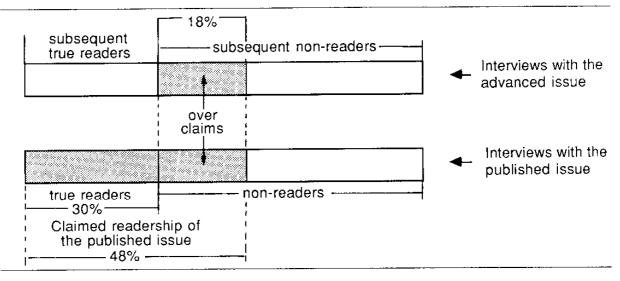
The non-consideration of underclaims is not the only weakness of the confusion control approach. To show the other weaknesses more clearly, it will be assumed that underclaims do not exist. This does not change the principle of the arguments but merely simplifies their presentation.

Second assumption: True readers do not make any mistakes with the advance copy because they remember specific reading occasions

Confusion control tries to eliminate overclaims by presenting an advance copy to a matched sample. All respondents in the matched sample are non-readers by definition and all claimed readership is automatically an overclaim. The following example shows the situation as the confusion control method thinks it is. (Figure 3)

In the matched sample, which saw only the advance copy, as many subsequent non-readers of the published issue claimed to have read the advance copy as there were actual non-readers of the published issue who claimed to have

## FIGURE 3



read it - and in both cases that was 18%.

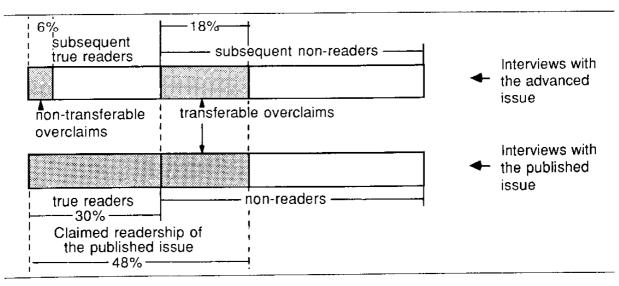
But when in addition to the 18% of overclaims by non-readers, only one of the subsequent true readers of the published issue claimed to have read the advance copy, confusion control calculates too low a true readership, because too many overclaims are subtracted from the claimed readership of the published issue.

### Not transferable overclaims

Claimed — Overclaims = Audience readership estimated
$$48\% - (18\% + 6\%) = 24\%$$

But the true readership is 30% and this difference comes about because overclaims by subsequent true readers

## FIGURE 4



in the advance copy interview are not transferable to the published issue interviews when, by definition, only non-readers can produce overclaims.

This is, therefore, a second example where the confusion control calculation systematically produce too low a coverage.

Why does this confusion control assume that the readers do not make any mistakes with the advance copy?

Confusion control assumes not only correct answers from true readers when the published issue is presented but also a subjective and accurate recall of the reading event itself by these readers. This is because only the accurate recall of the actual reading event with the published issue makes it possible for the advance copy to be identified as a non-read issue.

## Third assumption: Memory failure is proof of non-reading

Since non-readers do not have such comparable knowledge about published and advance copy, confusion control supposes that overclaims can only result from non-readers.

Fourth assumption: The questioned readers remember specific reading occasions - it is not necessary to know about their past reading habits

But the problem is that the readers probably feel overtaxed by the task of remembering exactly the specific reading event. They find it easier to think in terms of their normal reading habits.

Friedrich W R Tennstädt and J Hansen took up this position in New Orleans in 1981 and, before them, Dr Eva Maria Hess and K P Landgrebe did so.

A regular reader provides a good example for explaining the different effects of this position on the published and the advance issue. Regular readers, who read every issue,

make no mistakes in continuing their reading habits and affirming their reading of the published issue. It is not necessary that they remember exactly their specific reading occasion. However, confusion control does postulate just that and so this strategy generates an overclaim rate with the advance copy of 100%!

Richard Lysaker showed in the 'ARF Certitude Test No.3' empirical results. Most overclaims came from regular readers. He wrote:

"Nevertheless these incorrect claims of reading might not be overclaims in an actual readership survey if the respondent usually reads most issues of the magazine in question. And this seemed to be the case. Seventy-three per cent of the overclaims were by respondents who reported reading three or four of the last four issues of the magazine(s) overclaimed." (1979 p 13)

For this reason it is impossible to judge overclaims of an advance copy without knowledge of the respondents' reading habits.

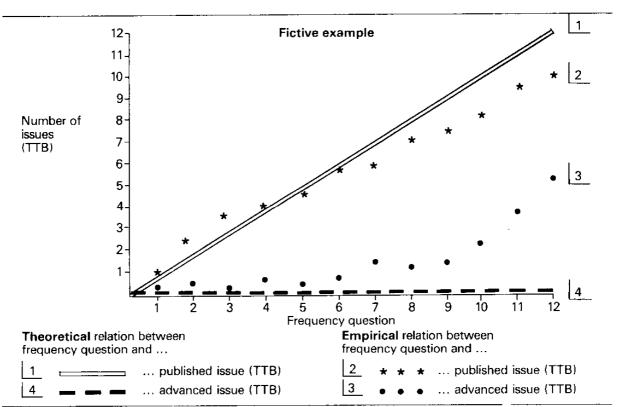
Unfortunately, there have been no comprehensive and systematic cross-tabulations between reading frequency and overclaim rate of advance copies in detail until now. Such a cross-tabulation is shown in Figure 5.

## CONFUSION CONTROL AND PLACEBO TEST COMPARED

The placebo test is only interested in measuring the effect of the drug. How many people have taken the drug is known, namely 100% of the sample. With confusion control, the question is quite the contrary. The number of readers is the unknown quantity which has to be calculated and it is supposed that real readers will give the exact truth in the interview.

On the other hand, if this is not the case then suddenly it has to solve an equation with two unknown variables!





The number of readers is not known and nor is how specific a reading event is being measured in the interview.

The placebo test is concerned with only one parameter - the effect (of the drug) - and that is why this problem is soluble and the problems confusion control are not.

## THE DILEMMA OF CONFUSION CONTROL

When the assumptions of the confusion control are true, overclaims with the advance copy are low, as none will come from readers and the so-called prestige answers of non-readers are not so frequent. When confusion control was first used, the overclaims tended to be relatively insignificant (about 2-3%), which meant that corrections were largely superfluous.

When the assumptions are not true, the

overclaims are high. However, readers must then have produced overclaims with the advance copy. That means confusion control is not applicable or only at the price of falsely reducing the true coverage.

Confusion control demands too much from the reader. He is not always able to remember exactly a specific reading event. (Maybe it was different 30 years ago.) For this reason it is recommended that this method should not be applied now. But if the method is used, the following improvements should be taken into account in every case.

## Weighting advance copy overclaims by readership frequency

Confusion control is concentrated on non-readers. As regards this group of people all the calculations are correct, but these measures produce counter effects among true readers, (claimed reading of the advance issue) which are much higher than the errors of the non-readers, which one would remove. And this makes no more sense.

Among true readers one has to make improvements without again simultaneously cancelling out measures against non-readers overclaims. This is in fact an insoluble task. It would

suppose that one knows who is a true reader and who is a non-reader. If this were so, confusion control would be superfluous. The result would be known already.

Nevertheless, a suggestion for improvement should be made here because the worst distortions among regular readers make the results of confusion control useless overall.

T	Α	В	L	E	1

Α	Frequency classes	12	/12	10/12	6/12	3/12	1/12	0/12	
В	Weights for overc $\frac{x}{1-12}$	laims:	0	.17	. 50	.75	.92	1.00	
			%	%	%	%	%	%	
С	Number of people frequency class i		20	15	30	10	5	20	= Σ 100%
	Readership of adv		%	%	%	%	%	%	
	issue per frequen class in %	су	70	30	10	5	5	2	
(overclaims)	(overclaims)	N =	14	4.5	3	0.5	. 25	. 4	= Σ 22.65 Readership of advance issue
E	Readership of		%	%	%	%	%	%	auvance issue
	published issue frequency class		90	70	45	10	5	2	
		<b>N</b> =	18	10.5	13.5	1.0	0.25	. 4	= Σ43.65 Readership of published issu
	Correction:								published 1334
F	$1 - \frac{x}{12}$ . $\eta$ (of	D )	0	.765	1.5	0.375	0.23	. 4	= Σ 3.27 Readership of advance issue after weightin by reading frequency
			. 1		usion c			$K_1$	
			classic %			after weighting by reading frequency %		( A x	(C)
	Published issue Advance issue Corrected reader	ship	<u>2</u>	3.65 <u>2.65</u> 1.00		43.65 3.27 40.38		<del>50</del> .	42

Answers to the frequency question "How many of the last 12 issues did you read?" do not represent reality. But the answers to this question are better than nothing. One can so weight the overclaims which come from the advance copy that the overclaims from non-readers are given a weight of one and the overclaims from the regular readers are given a weight of zero because this latter group could not make any overclaims when the published issue is presented. (See Table 1) (Schreiber & Schiller, 1983 p 249-250)

But one should be careful about placing too much faith in this. If an actual non-reader overclaims not only with the TTB but with the frequency question, he passes himself off as a regular reader, ie if he generally overstates, then this procedure fails.

And this calculation does not contain a correction for the underclaims of true readers.

# Mixed presentation of advanced and published issues

Presenting issues which have not yet been published is a tricky matter. Dr Otmar Ernst made an objection to this at the meeting of the technical committee of the MA in May 1983 in Hamburg. He said that presenting an advance issue linked with the question as to whether or not this issue was read, suggests to the respondent that this issue must really have been published. Possible doubts of the respondents may have been suppressed. A regular reader believes in good faith that he must have read this issue because he does not know of the existence of advance copies. That means, however, that media research possibly trips itself up with this methodological device.

In order to remove this survey trap, it is better to present the advance issue together with some published copies and call the respondents' attention to the fact that not all issues have already been published (Opfer & Müller-Veeh, 1983 p 109).

### STRICT CONTROL OF FIELDWORK

It is already bad enough if these readers who ought to know the issues best, the regular readers, make mistakes with the advance copies. It is even worse when, after finishing fieldwork, it appears that fieldwork has lasted longer than permitted, and the advance issues had by then already been published. Strict fieldwork control comes before any sophisticated analysis.

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