

*Exposure to just a single ad  
produced higher intent-to-purchase.*

# Sales Effects of Print Ads

Jan Stapel

The "black box" school of thought, in which actual sales are considered to be the sole yardstick of advertising effectiveness, leads to frustrating findings of no difference between exposed and unexposed respondents unless limited to the direct mail and retail sales fields, where positive results have abounded.

Only if one is willing to accept a substitute signal, like intent-to-buy, is it possible to observe effects of the majority of advertisements which deal with branded consumer goods. The question is: Do these signals correlate with actual purchases?

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## Method

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To find out, in January 1966 an intention-to-buy question was added to NIPO's regular "IMPACT" surveys on recall and recognition of print ads. Earlier data had shown that breakdowns of buying intent might provide clues to the sales effectiveness of single advertisements, but it was felt that a

large body of data from many surveys about numerous advertisements would be needed for tangible evidence of its usefulness.

Experience with the measurable effects of mail order advertising, and cases of high scoring ads for new brands or new products followed by immediate success in the market place, led to an inclusion of usage checks of the brand advertised and about non-users' intention-to-buy.

"Reinforcing" effects of an advertisement among established users were not measured. If a single ad could be shown to increase buying intent among non-users, it apparently would have an effect on action-related attitudes. This fact would add a new dimension to available post-testing procedures.

A verbal indication of buying intent needs validation since, as is well known, consumer buying plans are not always fulfilled. However, available evidence from panel-type repeat surveys showed that consumers indicating buying plans produced significantly

higher purchase levels than non-planners.

Another indication of the meaningfulness of verbal buying intent was available from product tests and advertising pretests in which respondents who said they were going to buy the product were given the opportunity to actually do so by filling out an order coupon for early delivery during the interview. In each of these tests, one new product was chosen for each particular experiment. In each interview, the normal "IMPACT" procedure was used. The specific procedure follows:

- Each respondent first went through a deck of cue cards listing the various brands advertised to obtain "claimed" recall.
- General, open-ended questions were then asked about each "claim" (with the answer recorded verbatim) to permit establishment of "proved" recall, idea communication, and persuasiveness later in the analysis.

- Following all recall questioning, respondents were re-exposed to the ads in the magazine to obtain recognition data, then the interview ended with typical demographic inquiries.

At the end of each interview, a verbal buying-intention scale was administered, and respondents claiming they would certainly buy were given the opportunity to do so by filling out order coupons.

## Results

Roughly one out of every two respondents who claimed a buying intent put his name and address on an order coupon for at home delivery. No price-reductions were given.

The resulting buying behavior in these six surveys was broken down by the intensity of ad-perception as measured by recall and recognition. As shown in Table 1, respondents recalling an ad show, on the average, twice as much intention-to-buy and produce twice as many order coupons as respondents who did not recognize the advertisement and who probably did not see it.

This fact, of course, does not prove causation. For example, possible future buyers could have "looked out" for the ad and memorized it for future action, thus making selective ad perception and recall a result of intent-to-buy that originally existed. Neither is causation proved by other buying intent data from "IMPACT" surveys. It is curious, however, that buying intent levels vary by brand among those who did not recognize ads, since selective non-perception ought to produce no buying intent for all brands. The results from one such survey are shown in Table 2.

Note that non-user subsamples vary for every brand and for every adver-

tisement. Within the non-user subsamples, there is variation by recall and recognition levels. Of the positive difference (buying intent higher among recallers of ad), about one third are statistically significant at the .05 confidence level.

As this general pattern emerged after 47 post-test surveys checking 1,376 different advertisements, totaling over 10,000 interviews, it became progressively harder to believe that intent-to-buy could not be a result of the advertisements.

That perception and recall helped coax non-users along to a predisposition to buy seemed more logical. There were several hundred cases in rebuttal to Haskins' (1964) 28 studies (of which only seven were in advertising) that led him to believe recall and retention measures are irrelevant to

changes in attitude and behavior. A more definitive study design seemed to be indicated, and additional data were gathered in 1967.

A random sample of 569 Dutch housewives was contacted for the regular "IMPACT" study among readers of women's weeklies. As usual, about four out of every ten (43 per cent) claimed reading *Margriet's* latest issue.

All 569 respondents, including the 325 non-readers of *Margriet*, were asked about brand usage and buying-intent. Interviews elicited reactions to the following stimuli very early in the interview before advertisements were even mentioned:

For each product listed on hand-out cards, respondents were asked to choose one of four sentences:

TABLE 1  
BUYING BEHAVIOR AMONG DIFFERENT AD PERCEPTION GROUPS

Product	Perception Group	Share (%) of Perception Group	
		Giving Verbal Certain-to-Buy	Completing Order Coupon
Supra Coffee, A	With Ad Recall	40%	20%
	No Ad Recall	24	10
	No Ad Recognition	21	6
Supra Coffee, B	With Ad Recall	32%	21%
	No Ad Recall	26	14
	No Ad Recognition	19	11
Duel Cleaner	With Ad Recall	37%	9%
	No Ad Recall	12	1
	No Ad Recognition	12	2
Philips Tape Recorder*	With Ad Recall	24%	17%
	No Ad Recall	10	9
	No Ad Recognition	10	7
Castella-Matic Detergent	With Ad Recall	21%	8%
	No Ad Recall	10	7
	No Ad Recognition	9	8
Supra Coffee, C	With Ad Recall	25%	10%
	No Ad Recall	10	2
	No Ad Recognition	5	1
Average Product	With Ad Recall	30	14
	No Ad Recall	15	7
	No Ad Recognition	13	6

\* The "order coupon" was for a brochure to be sent by the company to the customer rather than immediate delivery of the tape recorder itself.

We already use this.

We do not use this and are not going to buy it either.

We do not use this yet, but we are probably going to buy it.

We do not use this yet, but we are certainly going to buy it.

Claimed usage admittedly is a rough-and-ready measure, and it runs from possession of an appliance like a vacuum cleaner or refrigerator to more or less regular use of a given brand of soup, cologne, or potato chips. Claimed usage is given in Table 3.

As shown, the samples of *Margriet* readers and non-readers proved to be almost identical in their claimed usage. Usage obviously is liberally interpreted by most respondents and, as a consequence, non-usage must have been narrowly defined indeed.

Considering one specific ad, there

was a full page devoted to Little Honda in *Margriet* but in no other women's weeklies of that date.

Two per cent of the readers and one per cent of non-readers claimed usage (possession) of a Little Honda Moped, a small Japanese bicycle. Thus, there were 98-99 per cent non-owners. Of all non-readers of *Margriet*, five per cent indicated buying intention (probably + certainly). Among readers of *Margriet*, 11 per cent claimed buying intent.

Analysis of indicated buying intent over recall and recognition of the Little Honda ad is shown in Table 4.

Respondents who did not see *Margriet* (five per cent with intent-to-buy) and *Margriet* readers who apparently did not see the ad reacted almost identically.

Nationwide readership data were also available which showed that *Mar-*

*griet* and non-*Margriet* readers were being reached by about the same mix of other print media, radio, and television with the exception of the other three Dutch women's weeklies. Of the 325 non-readers, 29 per cent had read the latest issue of *Libelle*, 14 per cent

TABLE 3  
CLAIMED USAGE

	Among readers of latest issue "Margriet" (n = 244)	Among non- readers (n = 325)
	%	%
Smith chips	86	84
Philips appliances	84	84
Boldoot cologne	78	75
Unox soups	68	71
Trevira gowns	61	61
Castella toiletsoap	61	61
Fanta soft drink	55	51
Van Nelle tea	44	41
ADO Terlenka curtains	43	44
Schuttersveld corduroy	42	37
Castella toothpaste	39	37
Tufton rugs	39	33
Macleans toothpaste	37	33
Badedas (Vitabath)	30	26
Philips vacuum cleaner	30	25
Krommenie floorcovering	30	27
Boldon aftershave	28	20
Parley knitting wool	23	20
Tergal gowns	22	23
Margarete Astor cosmetics	20	14
Velours Doree curtains	17	16
Excelsior vacuum cleaner	12	10
Ceylon tea	12	14
Desso Enkalon floorcovering	11	8
Endocil cosmetics	7	5
Richelieu Enkalon floorcovering	6	4
Bruynzeel Finelux flooring	3	4
Bronswerk Fijenoord gas stove	3	X
Frisia gas stove	2	1
Zanussi washer	2	3
Little Honda moped	2	1
Constructa washer	1	1
Hoenson gas stove	1	1

TABLE 2  
INTENT-TO-BUY DATA FOR "MARGRIET" MAGAZINE

Advertisement	Buying Intent (%) Among Non-Users			Significance $\chi^2$ (L-Test)
	With Ad Recall	No Ad Recognition	Recall Group Difference	
Padawax Shoe Polish	56	10	+46	16.69
Philips Mixer	73	18	+55	16.27
Philips Coffeemaker	38	6	+32	9.77
Odol Mouthwash	29	2	+27	9.64
Philips Portable Radio	63	14	+49	8.47
Sinkal Cleaner	31	5	+26	8.41
Koala Pyjamas	43	14	+29	6.80
Camay Soap	47	16	+31	6.07
Hero Canned Vegetables	63	19	+44	5.41
Kijo Children's Clothing	33	8	+25	5.21
Honig Soups	25	0	+25	5.10
Jovanda Nylon Stockings	39	14	+25	4.77
Teddy Diapers	28	8	+20	4.35
Martini Vermouth	50	13	(+37)	Recaller Buying Intentions larger than (or equal to) Non-Recognizers, but not statisti- cally different (19 : 1 or better odd).
Honig Aromatic Sauce	50	13	(+37)	
Friesche Vlag Cond. Milk	50	17	(+33)	
Page Diapers	25	7	(+18)	
Momento Instant Rice	40	23	(+17)	
Honig Cake Mix	29	12	(+17)	
Macleans Toothpaste	27	11	(+16)	
Klokwit Washing Powder	17	4	(+13)	
Brillo Cleaner	17	4	(+13)	
Calvé Mayonnaise	18	13	(+ 5)	
Manil Handcream	12	8	(+ 4)	
Hollandia Underclothes	14	14	(± 0)	
Buying Intent averages:	37%	11%		

had read the latest *Eva*, and 11 per cent the latest *Prinses*.

Several other brands had been advertised in one or more of these other three women's weeklies; others had only been in *Margriet*.

The analysis in Table 5 was made for all brands that did not advertise in

other weeklies and of which 140 or more non-users were encountered among *Margriet* readers. (This eliminated the first eight brands in Table 3.)

In the matched sample of natural non-exposure (first column in Table 5) selective non-perception cannot have been at work. The almost identi-

cal buying intent levels among *Margriet* readers who did not recognize the ads (second column, Table 5) virtually exclude selective non-perception as a causative factor. By the same token, selective perception becomes an equally unlikely cause of the higher buying intent levels among recognizers and recallers in the third and fourth columns of Table 5.

Thus, these natural exposure/non-exposure results indicate that perception of a given advertisement (as measured by recognition and recall) does have causative effects on verbally expressed buying intention.

The nine brands, for which only

TABLE 5  
PER CENT BUYING INTENT  
AMONG NON-USERS OF BRAND

	Nat- ural non- expo- sure (re- spond- ents who did not read "Mar- griet")	Readers of "Margriet"	Rec- ogniz- ing ad but no recall	Re- call- ing ad
	%	%	%	%
Ceylon tea	6	5	10	13
Velours Doree curtains	26	21	26	33
Margarete Astor cos- metics	8	8	17	30*
Badedas (= Vitabath bath in U.S.)	19	19	32	32
Tufton rugs	18	21	30	29
Constructa washer	7	7	11	17
ADO				
Terlenka curtains	27	22	35	53**
Bolden after-shave	13	11	12	40
Bronswerk Fijenoord gas stove	3	7	11	31†
Little Honda moped	5	6	16½	45‡
Schuttersveld Ladyroy corduroy	30	24	35	35
Buying- intent averages:	15%	14%	19%	33%

\*  $X^2 = 3.85$  \*\*  $X^2 = 6.11$

†  $X^2 = 5.48$  ‡  $X^2 = 20.89$

(Standard chi square results have been indicated in this table and in Table 6.) Columns 1 and 2 show buying intention to be virtually identical among non-users who could not have seen the ad and non-users who read the latest *Margriet* issue but did not see (recognize) the particular advertisements.

TABLE 4  
NON-OWNERS OF PRODUCT

	Non- read- ers of "Mar- griet"	Readers of "Margriet"	Claimed see- ing or read- ing but no Proved recall
	(ALL)	ad	recall of ad
Intent- to-buy Little Honda	5%	(11%)	6% 16½% 45%



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TABLE 6  
PER CENT BUYING INTENT  
AMONG NON-USERS OF BRAND

	Nat- ural non- expo- sure (re- spond- ents who did not read "Mar- griet")	Readers of "Margriet"	Recogniz- ing ad, but no Recall- ing ad
	%	%	%
Bruynzeel flooring	7	8	10
Zanussi washer	11	11	11
Castella tooth- paste	10	17	14
Macleans tooth- paste	9	16	14
Parley knitting wool	18	11	31
Endocil cos- metics	7	5	8
Tergal gowns	34	34	34
Excelsior vacuum cleaner	6	4	15
Frisia gas stove	3	6	10½
Buying- intent av- erage	12%	12½%	16½%
* $X^2 = 6.39$		† $X^2 = 13.45$	

one other weekly carried an ad, produced the data in Table 6. Natural non-exposure to *Margriet* in the table results in a minimum of 71 per cent non-exposure to any of the ads. This explains why the figures at the bottom of Tables 5 and 6 differ so little.

The Tergal gown advertisement is interesting because buying-intent among non-users is at an extraordinarily high level, yet perceiving or even recalling the ad does nothing to improve it. This and several other ads could support Haskins' conclusion unless they were poor and ineffective ads, which on the basis of the available material seems more likely.

### Conclusion

The buying-intent statements, registered before anything was said or

asked about advertisements, may be considered as a better yardstick than cash register slips or factory deliveries. Such buying-intent statements have been validated in "interview order coupons." (They are in the nature of a "summing-up" of various underlying attitudes that can, of course, be measured separately.)

Non-users who prove recall of single ads produce on average from two to three times higher buying intent levels than non-users who do not recognize the ads. Non-recognition has, in a matched sample study, been shown to be virtually identical with non-exposure in this respect.

Conclusion: A considerable number of ads did cause increased buying intent. Immediate advertising results were correlated with the degree of intensity of an ad's perception.

### Answer to Louis Harris Question

When the President makes a speech on television to state his points of view on the war or some other subject, do you think the television networks should be required to give free time to members of Congress who oppose his point of view, or not?

	Should Be Required %	Should Not Be Required %	Not Sure %
<b>SEPTEMBER</b>			
<b>NATIONWIDE</b>	49	39	12
<b>REGION</b>			
East	52	36	12
Midwest	53	37	10
South	39	45	16
West	52	38	10
<b>SIZE OF COMMUNITY</b>			
Cities	53	36	11
Suburbs	55	38	7
Towns	46	44	10
Rural	44	39	17
<b>SEX</b>			
Men	51	39	10
Women	48	38	14
<b>RACE</b>			
White	49	41	10
Black	51	24	25
<b>AGE</b>			
16 to 20	61	29	10
21 to 29	58	37	5
30 to 49	44	44	12
50 and over	44	39	17
<b>INCOME</b>			
Under \$5,000	46	33	21
\$5,000-\$9,999	50	38	12
\$10,000 and over	50	45	5
<b>EDUCATION</b>			
8th grade or less	43	29	28
High school	52	38	10
College	48	45	7
<b>RELIGION</b>			
White Protestant	44	45	11
White Catholic	54	38	8
Jewish	67	18	15

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