More students subscribed to New York magazine when appeals stressed benefits and price.

The Impact of Message on Direct Mail Response

Noel Capon and John U. Farley

Unlike many forms of advertising, the nature of response to direct mail campaigns makes it possible to assess impact on the basis of sales (Farley and Harvey, 1972). It is also possible to follow up with interview studies for "reasons why" on a fixed and well-defined sampling of the solicited population. This article reports on the results of such a combined field experiment—sales response and personal interviews testing the impact of alternative sales messages.

The Offer

A random sample of 1,624 students registered at Columbia University and living nearby was offered a subscription to New York, a weekly magazine, at 10¢ per copy for a minimum of fifteen weeks, delivery to commence immediately. New York has a circulation of 300,000, mostly in the New York metropolitan area; its editorial thrust is "how to survive in, and thrive in, the world's most dynamic city"; and its target audience is affluent and sophisticated. Ten percent of sales are at newsstands at 50¢ per issue, and the stan-

dard subscription rate is \$10 per year (20¢ per issue). Various introductory offers have slightly different rates, the most advantageous of which is for students at 10¢ per copy. For the study, New York allowed the subscription period to vary to correspond more nearly to the school term. The solicitations were mailed in envelopes addressed personally to the prospects and had the first name of the recipient handwritten. To subscribe, the prospect filled in a tear-off portion of the letter with his or her name, address, and the number of issues requested and mailed it in an enclosed prepaid envelope. The respondent could enclose a check or be billed later.

The Treatments

The experimental treatments were different sales appeal messages modeled on Bales Interaction Process Analysis (Bales, 1950), developed from similar protocols used in a telephone experiment involving personal selling described elsewhere (Capon, 1974). Three such treatments were used—messages

basically cognitive, affective, and conative in nature; in addition, a straight price-oriented appeal was used for control. In the Bales scheme:

- Cognitive items give orientation, repetition, information, clarification, and confirmation of facts about the object.
- Affective items give opinion, evaluation, analysis, and expression of feeling about the object.
- Conative items give suggestions and direction for action related to the object.

It is of course impossible to construct a sensible affective or conative message without including some cognitive elements; so the test involving these messages is really on incremental effects of the affective and conative elements. The working hypothesis was that all three experimental treatments, since they provide more information, would dominate the control and that the affective and conative treatments, which gave affect and direction for action, would dominate the cognitive.

Journal of Advertising Research

The treatments were developed as follows:

1. Cognitive

This contains a series of cognitive statements relating to the magazine, providing the prospect with informational, nonevaluative statements about the magazine.

2. Affective

This contains the same basic information relating to the magazine as the cognitive treatment, but each group of statements is qualified by a series of positive opinions about features of the magazine.

3. Conative

This provides the same basic information about the magazine as in treatment (1). It differs from (2) in that each group of statements is qualified by a series of conative statements suggesting how the features of the magazine might benefit the prospect.

4. Price

This stresses the low price of the offering.

The dependent variables were choice (purchase) of the full sample and intention to purchase measured in a follow-up

questionnaire study on a subsample of those solicited.

Follow-Up Questionnaire

To measure attitudinal response to the message and the magazine, 120 dormitory residents were telephoned for an appointment for a personal interview two weeks after the mailing. A copy of the sales letter that the respondents actually received was used to refresh their memory in responding to a three-part questionnaire. Part 1 consisted of two series of nine-point semantic differential

Table 1

Direct Responses to Various Themes

Treatments

						Statistical
					e= w	Significance
	Cognitive	Affective	Conative	Price	Total	of Differences
Sales Letters Sent		102	107	406	1,624	***
to Entire Sample	406	406	406	46	166	n.s.
Purchases—Total	37	35	48	31	96	p < 0.05
Purchases in Week 1	19	14	32	31	90	p < 0.05
Purchases Later			76726	1.5	70	n.s.
than Week 1	18	21	16	15	64	p < 0.10
Payment	11	9	24	20	64	p < 0.10
Sales Letters Sent				***	* 200	
to Men	328	310	318	334	1,290	
Purchases—Total	27	20	34	31	112	n.s.
Purchases in Week 1	14	9	20	22	65	n.s.
Purchases Later					340	15 5
than Week 1	13	11	14	9	47	n.s.
Payment	8	4	16	9	37	n.s.
Sales Letters Sent						
to Women	78	96	88	72	334	V . 1
Purchases—Total	10	15	14	15	54	n.s.
Purchases in Week 1	5	5	12	9	31	n.s.
Purchases Later					02020	
than Week 1	5	10	2	6	23	n.s.
Payment	3	5	8	11	27	p < 0.10
Intention to Purchase						520 MAI (1997)
(Mean Score)	4.05	3.97	5.40	3.33		p < 0.05
(Mean Scote)						

Table 2
Varimax-Rotated Factor Loadings

on Raw Evaluative Scales Loadings¹ of

Evaluations of New York

Loadings of Evaluations of Sales Letters

	Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3	
Honest/Dishonest	821	074	-024	946	-032	-098	
Fair/Unfair	780	095	-027	774	-160	-177	
True/False	840	049	025	802	004	-073	
Tense/Relaxed	-270	-028	002	-263	-066	665	
Wise/Foolish	707	082	-012	608	178	023	
Active/Passive	179	686	063	-028	641	155	
Excitable/Calm	-070	521	138	-017	389	524	
Bold/Timid	319	679	184	140	627	208	
Heavy/Light	227	077	479	040	096	681	
Fast/Slow	032	697	075	111	465	-118	
Rugged/Delicate	-032	441	549	-099	527		
Hard/Soft	-058	279	825	-160	473	051 412	
Percent of							
Communal							
Variance							
Accounted for	29.6	22.4	11.3	27.3	22.0	11.0	
Suggested Factor				27.3	22.0	11.9	
Names	Attitude	Activity	Potency	Attitude	Forcefulness	Mood	

^{&#}x27;Figures are actual loadings × 1000.

items randomly ordered for position and direction. In the first series, twelve items evaluated characteristics of the magazine together with an intention to purchase measure. The second series, concerning the sales letter, included the same twelve items together with items on the perceived competence and trustworthiness of the letter. Part 2 consisted of a series of questions about demographic characteristics, habits, and knowledge of New York. Part 3 contained a series of scales designed to measure psychological characteristics.

Direct-Response Results

1. Purchase. Of 1,624 letters mailed (Table 1), a total of 166 purchases were made with sales rates ranging from a high 11.8 percent for conative to a low 8.6 percent for affective (not statistically

significant). The majority of purchases were made the first week after mailing, the speed of response varying across treatments with quicker response to the more compelling themes—those stressing price and the conative theme (p < 0.05). This result, early significance but later nonsignificance, suggests that Gatty's (1965) prescription for ending sales tests when significance is reached may be ill-founded. Women were almost twice as likely to respond overall as men—15.6 to 8.7 percent (Chi square = 14.27, d.f. = 1, p < 0.01).

More payments were received under the conative and price treatments than under the cognitive and affective treatments (p < 0.10). This is potentially important both for the timing of cash flow and the later costs of billing or non-payment. Women were more likely to

pay than men—52 to 33 percent (Chi square = 5.18, d.f. = 1, p < 0.05).

2. Intention to Purchase. Intention to purchase among nonbuyers is often used as a surrogate measure for impact (Farley et al., 1974). Average scaled intention for the conative message (5.40) again ranks highest and is significantly greater ($F_{(3,116)} = 2.71$, p < 0.05) than for affective (3.97) treatments and for the price treatment, which had the lowest mean value (3.33).

Factor Analysis of Evaluative Items

Since the twelve common semantic differential items used to evaluate both the letter and the magazine are intercorrelated, factor analyses were used to reduce the data set. The varimax-rotated loadings (Table 2) were similar in terms of both structure and explanatory power, each explaining about three-fifths of communal variance; unit eigenvalue cutoff criteria producing three factors in each case. In terms of the variables with loadings greater than 0.45, which are italicized, the structures are simple in that no variable loads on more than one factor, and only one variable, tense/relaxed (in the evaluations of the magazine), does not load at all. For evaluations of New York, the first factor emerging was employed as the operational definition of attitude toward New York, the remaining factors describing New York being characterized as activity (Factor 2) and potency (Factor 3). This is the same structure that emerged in the



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personal selling research on which this study is based (Capon, 1974). Three factors also emerged for the sales letter. The first factor was employed as the operational definition of attitude toward the sales letter and is nearly identical to that for *New York*. The second factor is similar, although the loading pattern is slightly different and may be described as forcefulness. The third factor has a somewhat different loading pattern that seems to be related to the perceived mood of the sales letter.

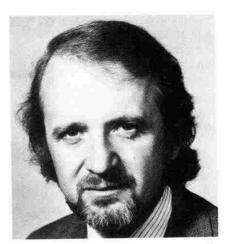
Factor scores computed for the three factors for *New York* and for the sales letter were used in subsequent correlation analyses and in analyses of variance and covariance.

Correlation Analyses

Three sets of correlation analyses were performed: one each on the dependent variables of *New York* and the sales letter and one on the intercorrelations between the two sets of eependent variables. The results, of these analyses are shown in Table 3.

- 1. New York. This section of the table shows a highly significant positive relationship between intention to purchase and attitude toward the magazine and lesser but significant relationships between intention and both comprehension and activity. Thus, both comprehension of and attitude toward the magazine are positively correlated with a surrogate to action, intention.
- 2. Sales Letter. A set of more complex significant interrelationships exists among the measures related to the sales letter. Thus, judged competence, trustworthiness, and attitude toward the sales letter are all highly correlated. In addition, the judged competence of the letter is highly related to the forcefulness factor, but forcefulness is not related to trustworthiness, indicating that the competence-trustworthiness relationship is subtle. The mood factor is negatively but weakly related to the judged competence, trustworthiness, and attitude toward the letter.
- 3. New York vs. Sales Letter. This section of Table 3 shows significant positive relationships between measurements on

New York and the sales letter variables. Thus, intention to purchase and attitude toward the magazine are both significantly and positively related to judged competence, trustworthiness, and attitude toward the sales letter. However, whereas intention to purchase is positively related to forcefulness of the letter, attitude toward the magazine is not. This suggests that the ingredients that produce the high forcefulness ratings are important in securing intention to purchase but not in securing a positive attitude.



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Table 3

Simple Correlations¹ of Scaled Evaluations for *New York* and Sales Letter

1.	IVE	WI	OFK

	Attitude	Comprehension	Activity	Potency
Intention	40***	18*	19*	-01
Attitude		04	05	-02
Comprehension			06	02
Activity				13

2. Sales Letter

	Trustworthiness	Attitude	Forcefulness	Mood
Competence	67***	70***	30***	-11
Trustworthiness		72***	08	-17*
Attitude			13	-05
Forcefulness				22**

New York vs. Sales Letter

	Competence	Trustworthiness	Attitude	Forcefulness	Mood
Intention	31***	36***	30***	23**	02
Attitude	45***	52***	58***	04	-06
Comprehension	-02	-02	-01	-09	-01
Activity	16*	15*	26**	35***	13
Potency	-07	06	-10	08	24**

p < 0.05

In addition to the strong relationship between attitude toward the magazine and the sales letter, positive relationships were also obtained between the second and third factors to emerge for each object. Thus, respectively, activity and potency of the magazine were positively related to the forcefulness and mood of the sales letter. These relationships suggest that the perception of the magazine is highly related to the perception of the sales letter, indicating that different types of letters may be optimal for different magazines.

Treatment Effects on Evaluations of New York and the Sales Letter

Differential effects of the four

treatments on these evaluations were examined using analysis of variance, analysis of covariance being employed to adjust these results for the covariate set. The covariates, drawn from Parts 2 and 3 of the post-questionnaire, are listed in Table 4. No statistically significant differences over treatments were found in the analysis of variance, although the conative and price messages tended to produce the highest mean responses to the magazine, and cognitive and conative messages the highest mean scores for the sales letter. The personal selling study upon which this experiment was based also found differences chiefly in favor of the cognitive and conative messages, although some of the experimental effects were significant in that case.

Some guidance concerning how people

viewed both the magazine and the sales letter is provided by examining the significant covariates emerging in the analysis of covariance (Table 5), although none of the main treatment effects were significant. Whether or not the subject had opened the magazine was related, not surprisingly, to comprehension, and satisfaction with way of life was related to a positive attitude toward the magazine. The activity factor was related to frequency of eating out and the potency factor to financial position. All of these evaluations are thus related to precisely the characteristics of the audience at which the magazine is aimed.

Perception of competence of the sales letter was related to satisfaction with way of life, as was attitude toward the magazine, which was also related to the number of roommates. Financial position, satisfaction with way of life, number of visits to the movies, and number of magazines looked through were significantly related to perceived trustworthiness of the letter—possibly indicating the relatively easy reachability of important target segments with mail appeals. The forcefulness factor was related to the frequency of eating out and the mood factor negatively related to the

Table 4 List of Covariates

Opened New York
Number of years lived in New York
Like living in New York
Financial position

Age

Student status—undergraduate/graduate Student nationality—foreign/American Sex

Number of magazines looked through per week

Number of magazines subscribed to Number of visits to movies per month Number of dinners eaten out per month Number of roommates

Living accommodation—apartment/dormitory

Way of life—satisfied/unsatisfied Way of life—outgoing/quiet Self-esteem

Locus of control Trait anxiety

^{**}p < 0.01

^{***}p < 0.001

^{&#}x27;Figures are actual correlations × 100.

Table 5

Treatment Effects on Evaluations of New York and Sales Letter

- Dependent	Treatment with	Significant		
Variable	Highest Mean	Covariates		
New York	al 22	Cariatian with way of life ()		
Attitude	Cognitive	Satisfied with way of life (+)		
Comprehension	Conative, Price (tie)	Had opened New York (+)		
Activity	Conative, Price (tie)	Number of dinners eaten out per month (+)		
Potency	Affective, Price (tie)	Financial position (+)		
Sales Letter				
Competence	Cognitive	Satisfied with way of life (+)		
Trustworthiness	Conative	Financial position (+)		
11 doe not continue		Satisfied with way of life (+)		
		Number of visits to movies (+)		
		Number of magazines looked through (+)		
		est the sac at least a particle of the sac		
Attitude	Cognitive	Satisfied with way of life (+)		
Forcefulness	Cognitive, Conative (tie)	Number of roommates (+)		
		Number of dinners eaten out per month (+)		
Mood	Price	Number of years in New York (-)		

length of time the subject had lived in New York (perhaps a rejection of the rigors of urban life). The latter result suggests a strategy of actively seeking subscribers among the new arrivals in the area.

Discussion

A single factor design with four messages (levels of treatment) was used to evaluate four alternative copy themes for New York, a weekly magazine. Three themes were drawn from Bales Interaction Process Analysis (cognitive, affective, and conative), and the fourth was a direct price offer. The cognitive message presented facts and essentially left the prospects to draw their own conclusions, while both the affective and the conative treatments drew conclusions but in different manners. The affective message states conclusions about the magazine, while the conative message states conclusions about the relationship between the prospect and the magazine. The experiment was run using direct mail appeals combined with follow-up interviews to evaluate personal reactions to both the magazine and the appeals. The conative and price treatments had immediate effects, producing significantly greater purchase than the cognitive and affective treatments in the first week, although as time passed the level of statistical significance dropped. The conative and price treatments were also superior in terms of obtaining immediate payment. They were also significantly better in influencing women, and directionally but not significantly so for men. Women were significantly more responsive than men to all appeals, and also significantly more likely to pay immediately.

In addition to its persuasive impact in inducing purchase, the conative treatment was also most effective in producing a high level of intention to purchase among nonbuyers. On the two sets of criterion variables, for *New York* and the sales letter, no significant results were found, although the cognitive, conative, and price messages often produced the highest scores, the affective message doing so in only one case.

The correlation analyses showed that intention to purchase was closely related to attitude toward the magazine. In addition, there were strong relationships between evaluations of the sales letter and of the magazine, one especially interesting result suggesting that the ingredients in the letter that produced high forcefulness ratings were important for obtaining intention to purchase but not for positive attitude. Life-style measures were shown to be related significantly to evaluations of letter and magazine in a pattern congruent to the editorial image of the magazine. In particular, people who are active in the New York environment (e.g., frequenting movies and restaurants) were favorably disposed, and newcomers to New York similarly appeared to be good prospects.

Finally, irrespective of treatment, the sales/mail-out ratio was high, averaging 10.3 percent and ranging up to 11.8 percent for the conative treatment. It appears that the particular student population chosen is a prime untapped market segment for this and similar appeals.

References

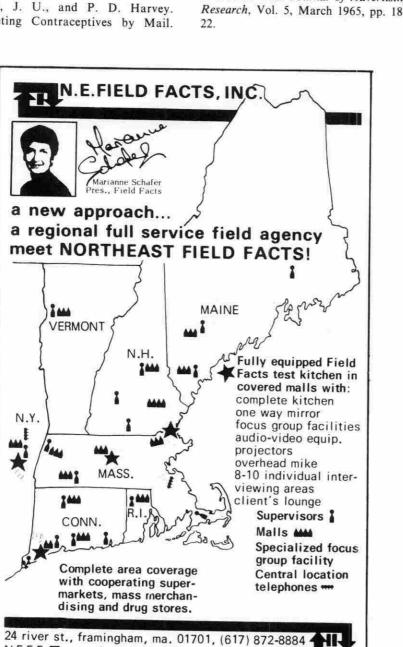
Bales, R. F. Interaction Process Analysis. Cambridge, Mass.: Addison-Wesley, 1950.

Capon, N. Persuasive Effects of Sales Messages Developed from Interaction Process Analysis. Journal of Applied Psychology, Vol. 60, April 1975, pp. 238-

Farley, J. U., and P. D. Harvey. Marketing Contraceptives by Mail. Journal of Advertising Research, Vol. 12, October 1972, pp. 15-18.

Farley, J. U., J. A. Howard, and D. Weinstein. The Relationship of Liking and Choice to Attributes of an Alternative and Their Saliency. Multivariate Behavioral Research, Vol. 9, January 1974, pp. 27-35.

Gatty. R. How to Control the Duration of a Sales Test. Journal of Advertising Research, Vol. 5, March 1965, pp. 18-



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