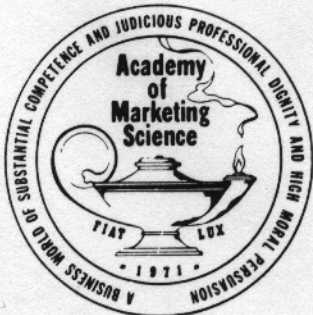


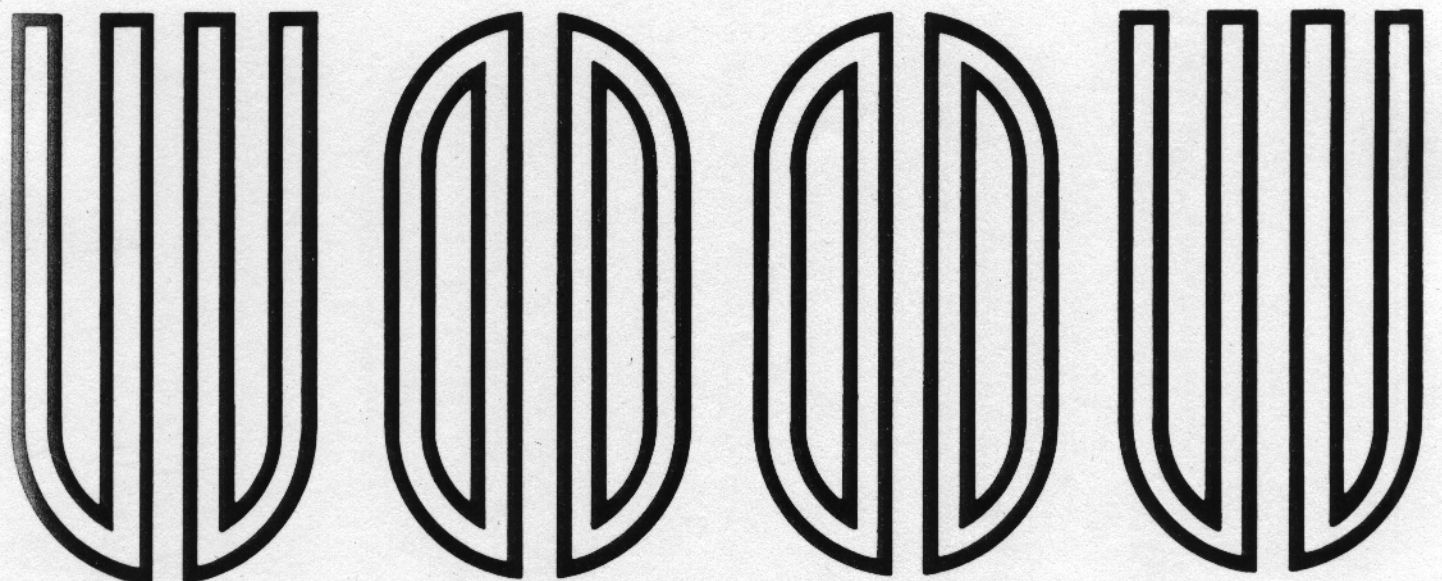
Developments in Marketing Science

VOLUME IX 1986



Edited by:
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Co-Editor:
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ATTITUDINAL AND BEHAVIORAL RESPONSE TO COMPARATIVE ADVERTISING: AN EXPERIMENTAL FIELD ANALYSIS

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Abstract

Contrary to the widespread international practice of comparative advertising, most communication-effects studies have found its relative effectiveness equivocal. The author uses an attitudinal and behavioral response approach in a field study to examine the differential effects of comparative and non-comparative advertising. Results suggest that, while no differences in the relative effectiveness are found on attitude measures, comparative advertising excels at the behavioral criterion.

Introduction

Comparative advertising seems to be making regular appearances in the kaleidoscope of marketing communications. Soldner's (1978) appraisal of comparative advertising's international practice indicated a very strong global trend toward its widespread use and acceptance. Despite its frequent use in the media, a growing body of studies finds it less effective than its non-comparative counterpart. With the advent of Wilkie and Farris' (1975) positive evaluation of comparative advertising effectiveness against concepts drawn from the behavioral sciences, research has primarily focused on measuring its effects only on attitudes and purchase intentions. Aside from Jain and Hackleman (1978), Prasad (1976), and Swinyard (1981), who reported some benefits for its use, most researchers have expressed doubts about its relative effectiveness (Golden 1975; Ogilvy and Mather 1975; Wilson 1976; Etgar and Goodwin 1978; Levine 1976; Shimp and Dyer 1978; Belch 1981).

Relevant Literature

Comparative advertising began to gain momentum in the 1970's, partly due to the assumption that it would provide the consumer with additional information for evaluating the relative merits of competing brands (Schnabel 1974-75). Chairman Michael Pertschuk has had a "godfatherly" influence on this movement by encouraging advertisers to use comparative advertising strategy (Cohen 1976). As a result, the networks lifted their ban on comparative advertising and began to provide inertial guidance to the industry. Wilkie and Farris' (1975) inductive reasoning that comparative advertising should outweigh its non-comparative counterpart by generating increased attention and recall, increased comprehension of claims, and greater yielding to claims, spurred a surge of studies.

Studies of Pride, Lamb, and Pletcher (1977) and Golden (1979) reported claim acceptance of comparative advertising was no more effective than non-comparative advertising. Prasad (1976), Levine (1976), Boddewyn and Marton (1978), and Wilson and

Muderrisoglu (1979) found that comparative advertising was less credible. Shimp and Dyer (1978), Levine (1976), and Sheluga and Jacoby (1978) found comparative advertising to be even less effective than non-comparative advertising. Since most of these studies had relied on attitudes and intentions to buy as dependent variables for the effectiveness measurement, Belch (1981) used a cognitive response approach to investigate the relative effects of one- and two-sided comparative and non-comparative commercials. Results indicated "qualitative" differences in the mediating roles of cognitive responses for the two kinds of messages. However, no differences in the relative effectiveness of comparative and non-comparative messages were found for both attitude and purchase intention measures.

The equivocal findings in the effectiveness of comparative advertising could, perhaps, be explained by the theoretical assumptions underlying research in this area.

Attitude As Predictor of Behavior

Most researchers on comparative advertising seemed to have tacitly subscribed to the assumption that attitudes predict behavior. For example, in Golden's (1976) study respondents were asked whether or not they would purchase the brand advertised through comparative advertising or the competing brand; since she did not find a significant difference between their intentions to buy both brands, she concluded that the effectiveness of comparative advertising has no more impact on purchase intentions than that of conventional advertising.

"The assumption is made that the stronger the emotion (attitude), negative or positive, the greater the action-tendency involved and the greater the predisposition to buy the product -- an assumption as yet unproven," points out Kassarian (1977). Since the relationship between attitude, intentions, and purchase (behavior) is tenuous (Fishbein and Aizen 1973), the communication-effect research results really have not adequately determined the efficacy of comparative advertising.

An overview of research based on Fishbein's models on consumer products does show acceptable high correlations between attitudes and behavioral intentions (intentions to buy). However, the correlations between behavioral intentions and overt behavior remain not only poor, but generally lower than those obtained in social psychological studies (Ryan and Bonfield 1975). In fact, such an argument has created a controversy and established two schools of thought. There are those who believe that attitude change results in behavioral change, and therefore, both are significantly related (Grey Matter 1968, p. 1). For example, Kair's (1965) study reported that good commercials affect both attitude and behavior; Fendrich's (1967) study suggested that attitudes will predict behavior if proper attention is paid to measurement.

There are others who believe that behavior cannot be predicted from attitudes. There is a considerable body of evidence that shows that attitudes and behavior are very weakly related (Day 1973). One such finding came from the classical study of LaPiere in 1934. Festinger (1964), for example, could not find any consistent evidence that attitudes and behavior are related.

A. W. Wicker (1969) reviewed 32 studies on the attitude-behavior relationship and concluded "that it is considerably more likely that attitudes will be unrelated or only slightly related to overt behaviors than that attitudes will be closely related to actions." Fishbein (1967) provides further negative evidence that attitudes and behavior are related by concluding that:

Indeed, what little evidence there is to support any relationship between attitude and behavior comes from studies that a person tends to bring his attitude into line with his behavior rather than from studies demonstrating that behavior is a function of attitude.

Bostrom (1970) warned that there is considerable evidence obtained from both social psychological and marketing studies that unidimensional, affect-type models are poor predictors of subsequent behavior. In an attempt to circumvent the single component model of predicting behavior, Bagozzi, et al. (1979) tested the construct validity of the tripartite model of attitudes (affective, cognitive, and conative) and found mixed evidence for the predictive validity based on actual and intended behaviors.

Since studies have failed to yield strong support for the assumption of attitudes-behavior consistency, the purpose of this study is, therefore, to explore the differential effects of comparative advertising through both the attitude construct and the purchase behavior of consumers. Accordingly, two hypotheses were tested:

H₁: The pre-purchase attitudes of subjects toward a low cost product will not differ significantly when it is either promoted through a comparative or conventional advertising strategy.

H₂: Purchase rate of a low cost product will be higher when it is promoted through a comparative rather than conventional advertising strategy.

Unless we measure comparative advertising effects on behavior also, we would be running the risk of condemning prematurely a form of communication which might otherwise prove to be a powerful persuasive tool.

Subjects

Two types of advertisements were manipulated randomly on a sample of 273 undergraduate marketing students. The two different categories of ads were comparative and conventional. These ads were based on actual advertisements about two virtually identical ball point pens, Scripto and Paper Mate. The product information was confined to a selected number of attributes common to both brands (such as carbide point vs. nylon point, price, writing performance -- skips or does not skip, supply of ink). To be consistent with the previous studies, low cost experimental products were chosen for the present study. For example, deodorants were used by Golden (1975), detergents by Ogilvy and Mather (1976), and toothpaste by Beich (1981).

All of the ads contained objective information, regardless of the brand of pen and type of treatments. Scripto was compared to Paper Mate in the comparative advertisement. The comparative ad for Scripto differed from its conventional ad only in the way the statements were made about the same number and kind of attributes, the only difference lay in presenting the attributes in a "comparative" statement (e.g., Scripto has a hard, rough textured carbide ball point which writes on any surface and won't skip under any circumstances, while Paper Mate has a nylon point which wears out quickly). On the other hand, in the conventional ad for Scripto the same attributes were put in a "normative" statement form (e.g., Scripto has a hard, rough textured carbide ball point which writes on any surface and won't skip under any circumstances). In the conventional advertising, the competing brand was not mentioned.

The experiment was conducted both in the classroom and in the marketplace. The classroom was used to expose the two experimental groups of students to a portfolio of advertisements. To minimize possible reactive error due to somewhat artificial setting which would bias results, a cover story was used under the pretext of requesting students to participate in a survey study to determine the feasibility of direct marketing of school supplies to college students. In an attempt to justify the inclusion of the experimental filler ads, students were informed that the companies interested in the study of direct marketing of college supplies wanted to compensate the participants for their time and suggestions; since the companies offered a number of competing products, ads were included to provide the participants with the pertinent information for correct product selection.

Procedure

Each subject received randomly one of two types of portfolios of advertisements: for the comparative treatment group, the portfolio contained the cover story, one comparative advertisement favoring Scripto over Paper Mate, one conventional advertisement favoring Paper Mate, and two filler advertisements about two kinds of dictionaries (one in comparative ad, the other in conventional format). While the portfolio for the conventional treatment group consisted of the same conventional advertisement favoring Paper Mate, the two conventional filler advertisements, and the same cover story, a conventional advertisement favoring Scripto was included in this portfolio instead of a

comparative advertisement favoring Scripto over Paper Mate. To avoid any possible interaction effects, subjects were asked to read the material individually. After reading the material and examining the content of the portfolio, subjects were asked to complete a brief questionnaire on the cover story and then were asked to fill an attitudinal questionnaire pertaining to the products advertised under the pretext that the companies wished also to benefit from this occasion by knowing what the students thought of their products. Finally, each student was given a coupon for redemption at a 40 percent discount of the retail price toward the purchase of either Scripto or a Paper Mate ball point pen. Each pen was priced at 98 cents. To hedge against any possible order effect, Scripto and Paper Mate names were printed in reverse order on 50 percent of the coupons. Subjects were told that they could redeem the coupons at the university bookstore, where the experimental pens were displayed at the pen counter.

Dependent Measures

To collect data on the purchase variable, coupon redemptions were noted for each brand. The effectiveness of the sales promotion tool in terms of coupon incentives for securing immediate trial purchasing has long been recognized in marketing.

To render the coupons redeemable only by the subjects, each subject was asked to write his or her name on the coupon and the clerks at the counter were instructed to verify the name appearing on the coupon against the student's ID so as to avoid collecting biased data. Moreover, the clerks at the checkout counter were instructed to circle on the coupon the purchased brand. Such a procedure made it possible to keep track of the brand of pen purchased by the experimental subjects.

As for the other dependent variable, pre-purchase attitude data were collected through the basic multiattribute attitude model. The belief statements (for determining the subjects' overall attitude) were based on the selected product attributes which were also used in the experimental advertisements for describing the merits of the products. Again, in an attempt to avoid possible order effect, brand names and scale values were reversed in half of the sample.

Results

Before discussing the results, it should be noted that any generalizations of the findings should be confined to the subject of this study.

Attitudinal Response

The mean ratings of the experimental products are summarized in Table 1.

TABLE 1
MEAN RATING OF SCRIPTO AND PAPER MATE

	Scripto	Paper Mate
Comparative Treatment	1.32	1.75
Conventional Treatment	1.29	1.36

Two-way analysis of variance was applied on the pre-purchase attitudes toward the experimental products. Results did not indicate significant main effects for the two treatments ($F=2.30$, $df=2,542$, $p>.05$) (see Table 2).

There is no statistically significant difference between the two treatments: the comparative treatment has no greater effect on the subject's attitude than the conventional treatment. Furthermore, pre-purchase attitudes toward Scripto are not different at the .05 level. Also, the analysis indicates that there is no significant interaction effect between treatments by pen ($F=.565$, $df=1,542$, $p>.05$). H_1 is supported by the data. That is, the pre-purchase attitudes of subjects toward a low cost product will not differ significantly when it is either promoted through a comparative or conventional strategy. This finding is consistent with the results obtained in past studies based on the attitude construct (Golden 1975; Ogilvy and Mather 1975; Wilson 1976; Etgar and Goodwin 1978; Levine 1976; Shimp and Dyer 1978; Belch 1981).

TABLE 2
ANOVA OF PRE-PURCHASE ATTITUDE TOWARD THE EXPERIMENTAL PRODUCTS

Source of Variation	SS	d.f.	MS	F
Main effects	1.958	2	.979	2.305*
Pen	.532	1	.532	1.253
Treatment	1.407	1	1.407	3.313
Interactions	.240	1	.240	.5651
PXT	.240	1	.240	.5651
Residual	230.192	542	.425	
Total	232.396	545	.426	

* $p>.05$

Behavioral Response

Of the 273 subjects, 174 (63.7 percent) redeemed their coupons toward the purchase of either Scripto or Paper Mate pens. Table 3 summarizes the types of pens bought under each treatment.

TABLE 3
PENS PURCHASED UNDER COMPARATIVE AND
CONVENTIONAL ADVERTISING TREATMENTS

	Scripto	Paper Mate	Total
Comparative Treatment	84	25	109
Conventional Treatment	23	42	65
Total	107	67	174

Subjects in the comparative group purchased 84 Scripto and 25 Paper Mate pens; while, in the conventional group, 23 Scripto and 42 Paper Mate pens were bought.

Analysis of the data resulted in a X^2 of 29.99 (1 d.f., $p < .001$, corrected $X^2=29.92$). The data supports H_0 by showing that subjects purchased more Scripto pens due to the comparative advertising even though Paper Mate was the preferred one under the conventional treatment. The finding for the behavioral response in this study can be stated that the sponsor brand sold better through the comparative ad than through the conventional ad. Such a finding contradicts previous studies on comparative advertising which implied that comparative advertising was not any more effective than conventional advertising on consumers' purchase behavior as reflected from the respondents' attitudes and intentions to buy (Golden 1975; Ogilvy and Mather 1975; Wilson 1976). But the finding is consistent with the studies which indicate that attitudes are weakly related to behavior (Festinger 1964; Wicker 1969; Day 1973).

Future Research

To extend the scope of the research on comparative advertising, it would be highly desirable to investigate its differential effectiveness across various media such as print vs. broadcast.

Another important research question to be answered is whether or not comparative strategy is also effective in the sale of high ticket products where the consumer tends to form a strong pre-purchase attitude before buying an expensive or complex product, such as a movie camera or a stereo system. Although not difficult, but costly, further research is needed to include both low cost and high cost products to see if respondents' pre-purchase and post-purchase attitudes differ markedly across these two categories of products. An inquiry is also needed to see whether or not comparative advertising is more effective for the promotion of a new product than for an established one. The new product may elicit curiosity, need for novelty, etc. in the consumer and thus, may induce him/her to purchase it.

Finally, to depart from the usual methods of measuring comparative advertising effectiveness through the consumer's attitudes, further experi-

ments are needed to determine its effectiveness on purchase of different categories of products. After all, the ultimate success of the marketing manager depends on profitable sales which is highly congruent with corporate survival and growth objectives.

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