This paper investigates the potential effectiveness of counter advertising in influencing the buying habits of a convinced audience. One month before the actual study, 109 subjects indicated a brand preference in a consumer questionnaire. The subjects were randomly assigned to groups that viewed one of the following: (1) a pro-Bayer aspirin commercial, (2) a counter-Bayer aspirin commercial, (3) both pro- and counter-Bayer commercials, and (4) neutral commercials. Positive and negative attitudes were assessed immediately following the commercials, and again two weeks later. The research concludes that a single advertisement does not cause notable change of attitude in subjects who initially indicated a preference for a particular brand. (MAB)
EFFECTIVENESS OF A TELEVISION COUNTER ADVERTISEMENT

by

James T. Lull

and

Anthony Mulac

Department of Speech
University of California, Santa Barbara

"Permission to reproduce this material has been granted by

James T. Lull

Anthony Mulac

To the Educational Resources Information Center (ERIC) and users of the ERIC System"
EFFECTIVENESS OF A TELEVISION COUNTER ADVERTISEMENT

Mass media attempts at persuasion through commercial advertising are naturally conducted in a single-minded, cumulative fashion. Seldom is the wisdom of recommendations made in commercial announcements challenged publicly. Owners and managers of radio and television stations, for instance, have not encouraged citizen analysis or response to the claims made by advertisers who pay for commercial time on the airwaves. However, this condition of information monopoly became a worrisome issue for the nation's broadcast industry in the late 1960's and early 1970's when the airing of cigarette commercials was contested legally by a citizen. A Federal Communications Commission (FCC) fairness doctrine complaint was filed against the networks for their one-sided presentation of the health issue related to the smoking of cigarettes. Subsequent action by the FCC required broadcast stations to present "counter ads" which advised viewers not to smoke cigarettes. For a few years it was not unusual for television
viewers to see and hear a message telling them that Salem were "springtime fresh" and later to encounter an American Cancer Society spot showing a smoker coughing loudly with the message that cigarettes can kill.

The cigarette ruling encouraged consumer groups to take up the fight against other environmental hazards with the production of "counter ads" on a variety of subjects and the simultaneous filing of appropriate fairness complaints. When the FCC realized that the continued application of the fairness doctrine to commercial broadcasting threatened the economic basis of the electronic media, it advised that the cigarette issue was to be a special case. Undaunted by this, volunteer-based production houses, such as the Stern Concern in Beverly Hills, Calif., and the Public Media Center in San Francisco, began to turn out a variety of counter ads which challenged the advertising of many sponsoring corporations. Then, in a move that outraged the broadcasting and advertising industries, the Federal Trade Commission announced support for the concept of "counter advertising," but advised that its sister agency, the FCC, was the responsible regulatory body since the concept rests on the requirements of the fairness doctrine, an FCC ruling. A vigorous debate ensued with the advertising industry claiming that counter advertising "would foster economic inefficiency...moreover...the potential of counter advertising to reduce brand loyalties supplies a powerful reason against its adoption." It is this assertion by the opponents of counter advertising that is tested in the present investigation.

We are concerned with the potential effectiveness of counter
advertising messages—their ability to influence perceptions of favorability toward the brand in question, and their effect on the salience of the brand in the minds of audience members.

Fortunately, there is a 30-year body of research in persuasion theory to build upon. The famous work by Hovland and his associates applies to the counter advertising question. Hovland et al. were concerned with message sidedness, finding that receivers of messages behave differently toward issues when one-sided or two-sided appeals are made. The concept of an "innoculation effect" was derived from work by Hovland, Janis and Kelley. They found individuals who had been exposed to both sides of an argument (with one side refuted) more resistant to later counter persuasion than persons who had heard only one side of the issue. The researchers suggest that exposure to both sides of an issue makes the individual more wary the next time he or she hears an advocative argument! These findings, if extended, may be pertinent to advertising and counter advertising. According to the logic revealed by the researchers in persuasion, if the counter advertiser's message can be made clear to the audience, there may be more resistance to the advertiser's one-sided pitch at a later time. In general, the presentation of counter arguments about the value of product groups or brands may lessen the impact of later commercial messages.

Further, a two-sided presentation has been found to innoculate effectively even when the negative argument was presented one week following the initial positive argument. This suggests that conflicting perspectives on the issue need not be presented in the same utterance in order to innoculate well. So, in radio or television, it
may not be necessary to include the counter argument as part of the positive message or follow it immediately. Even if viewed somewhat later, counter advertising may prove to be persuasive in its ability to lessen the impact of the initial appeal.

Some beginning analyses of the effectiveness of counter advertising have been made. Hunt has shown that in the print media it has an ability to significantly decrease attitude favorableness toward a gasoline product under certain research conditions. O'Keefe studied the reactions of audience members to the anti-smoking ads discussed above. He concludes that these counter ads are greatly limited in their ability to affect behavior. According to O'Keefe, "only those persons who are already inclined to give up smoking reported the commercials as having any significant effect on them." Oll found only partial support for the hypothesis that subjects exposed to an anti-Bayer aspirin message would reduce attitude favorability toward the brand more than those who had not seen the counter ad. Also, non-users of Bayer were more likely to believe the counter ad than Bayer users. The research reported herein builds upon that study.

METHOD

Design of the Study. A research format was devised to measure the persuasiveness of the anti-Bayer counter advertisement. Subjects' brand preferences for aspirin products were ascertained. One month later, subjects were randomly assigned to one of five treatment groups to view a set of television commercials. Treatment groups differed as to whether they viewed a pro-Bayer commercial, a counter-Bayer commercial, both pro- and counter-Bayer, or neither of these.
The order of treatment presentation was also systematically varied. Following viewing, subjects completed a questionnaire which ascertained their attitudes toward Bayer. A measure of brand salience was also made at this time. Analyses of variance were conducted to determine differences between treatment groups. Details of these design considerations are presented below.

**Subjects.** A total of 109 subjects from a beginning undergraduate course in communication at the University of California, Santa Barbara, served as volunteer subjects for the study.

**Treatment Groups.** Subjects were randomly assigned to one of five treatment groups. The viewing groups differed only in the content of the commercial stimuli which were presented:

- **Group #1.** Five commercials with pro-Bayer presented second and counter-Bayer fifth.
- **Group #2.** Five commercials with counter-Bayer presented second and pro-Bayer fifth.
- **Group #3.** Four commercials with pro-Bayer presented second.
- **Group #4.** Four commercials with counter-Bayer presented second.
- **Group #5.** Three commercials with neither pro-Bayer nor counter-Bayer presented.

**The Commercials.** The pro-Bayer commercial was part of a Bayer television advertising campaign conducted by Sterling Drug in 1973. It features a distinguished appearing man who instructs that "for pain, Bayer is proven superior." The counter-Bayer commercial, produced at about the same time by the Stern Concern, has Burt Lancaster as the spokesperson. Holding a bottle of Bayer aspirin in clear view of the camera, he claims that "there is no scientific evidence to suggest that one brand of pain reliever is better for relieving..."
pain than any other." These two messages sharply disagree on the value and performance of Bayer aspirin when compared to other plain aspirin remedies. The three filler commercials which all subjects viewed were about unrelated products and were included in the stimulus package in order to disguise the intent of the research.

Data Gathering Procedures. Subjects were given a consumer profile questionnaire one month prior to the time they viewed the commercials. A confederate, posing as a researcher interested in buying habits, distributed the questionnaire which inquired of the students' use of brands of several household products, including aspirin. Subjects were at no time advised that this consumer "study" had any relationship to the television viewing which was done later. The questionnaire provided a convenient means by which Bayer users and non-users could be identified.

One month later, subject groups viewed the commercials on a standard color television monitor in a communications laboratory. After viewing, subjects in each treatment group were asked to complete a form which inquired of their attitudes toward all the products advertised in the commercials they saw. Four validated Likert-type items were used for each product presented in the commercials, including Bayer. In this way, the degree of subjects' attitude favorability toward Bayer following the viewing session was ascertained. In order to measure attitude salience toward Bayer after viewing, the new Attitude Pie technique was employed. With this instrument, degrees of positive and negative feelings toward Bayer were assessed. By summing these indices, a measure of salience was derived.
Following Campbell and Stanley's advice, we did not risk subject sensitization toward the purpose of the study by pre-testing respondents' attitudes toward Bayer before the viewing sessions. As these authors suggest, random sample selection and randomized treatment group assignment should insure that differences which may exist in post-only measurement can be reasonably attributed to treatment effect. 12

Two weeks following viewing of the commercials in the treatment groups and completion of the post-stimulus measures, subjects were again asked to complete the same Likert-type and Attitude Pie questionnaires. These provided a test for possible short term regression toward initial attitudes, maintenance of attitude change, or "sleeper effect."

RESULTS

Subject's responses to the four Likert items dealing with Bayer were summed to form scores reflecting favorability toward Bayer. These were subjected to a three-way analysis of variance with repeated measures (5 treatments X 2 user groups X 2 measurement times). Results are given in Table 1.

| Insert Table 1 about here |

| Treatment Effects: The five treatment groups (i.e., those who had viewed different combinations of pro and counter-Bayer ads) failed to differ in their attitudes toward Bayer. Nor did treatment condition interact with either of the other two independent variables. |
Effects of Subject Use of Bayer: Subjects in this study who were Bayer users demonstrated significantly higher favorability toward the brand than did non-users. Further, Bayer users failed to differ in their support for that brand whether they had seen pro-Bayer, counter-Bayer, or no aspirin ads.

Effect of Time of Measurement: Subject attitudes were measured at two points in time to determine whether groups differentiated by treatment or brand use varied across time in their attitudes toward the product; no such interactions were found. However, an unexpected significant main effect was found on time of measurement. Favorability toward Bayer increased for all subject groups during the two weeks intervening between the first and second measures. It should be noted that this difference could have been an artifact of the different settings used for the two measurements. The first took place in a laboratory in the presence of the senior investigator, the second in a classroom without one of the investigators present. It is, of course, also possible that the treatments employing advertisements for a variety of products made the subjects think more critically about their preference for name-brand products, thus having a depressing effect upon their first measurement scores in general. One-way analyses of variance on Likeit items dealing with the non-aspirin ads viewed by the subjects showed, for two of the other three products, a similar increase in favorability of attitude from the first to the second measurement (p < .01).

Salience, the importance subjects attached to their positive and negative attitudes toward Bayer, was analyzed using the Attitude...
Pie data. Individual subject salience scores for Bayer were computed by summing "positivity" and "negativity" scores on the Bayer item. As in the case of the summed Likert scores, salience scores were subjected to a three-way analysis of variance with repeated measures (5 treatments X 2 user groups X 2 measurement times). No F ratios, for either main effects or interactions, approached statistical significance. However, trends in the data suggested that subjects who saw both the counter ad and the pro-Bayer ad may have felt less salience regarding their attitudes toward Bayer than those who viewed only the pro or the counter ad.

DISCUSSION

This research provides no conclusive evidence that one viewing of a television counter advertisement is powerful enough to significantly alter the attitudes of television viewers toward the product. Of course, this assertion is made with recognition of the possibility that the research design or measurement instruments may not have been able to detect possible effects of favorability. However, the significant main effects on Likert scores of favorability attributable to subject use of Bayer and time of measurement indicate that the measurement procedure was sufficiently sensitive to detect meaningful differences. These findings, along with the rigorous experimental design controls employed, argue strongly for the interpretation that failure to find treatment differences resulted from the fact that the treatments did not differentially affect attitudes in the subjects. The absence of treatment differences on the dependent variable of salience adds further support to this interpretation. As employed here, the use of pro- and
counter-Bayer ads appear to have had no substantial effects upon subjects' favorability of salience of attitude toward the brand under investigation.

The fact that users of Bayer maintained a significantly more favorable attitude toward the product, regardless of the commercials they viewed, is consistent with previous research. In line with the commonly held idea that attitudes are particularly difficult to change, users of this product, at least, did not significantly diminish their attitudes toward Bayer even after viewing a professional counter commercial which was blatantly critical of the product.

The trends in the salience data may have important implications and should provoke further research. While the F ratios failed to reach significance, there is some suggestion that viewers tended to reflect a higher degree of salience of attitude toward the product after they viewed a one-sided appeal. The presentation of both pro and counter messages may serve to suppress attitude salience. Perhaps, a one-sided message, either pro or con, makes thinking about the issue (in this case the desirability of a particular brand) less tension-producing, thus permitting a person to assign a higher degree of attitudinal importance to it. The psychological reaction to a two-sided presentation (pro and counter ad within the same commercial cluster) may be that the issue finds a less salient position in the cognitive structure. Further research is required to properly test this notion. With the Attitude Pie instrument substantial within-group variability may have kept the differences in group scores from reaching statistical significance. Another measurement approach may successfully demonstrate differences between
these groups on the salience dimension.

This research reveals that a single counter advertisement, at least concerning Bayer aspirin, does not cause viewers to lessen appreciably their attitude favorability toward the brand. At this point, at least, it also appears that the presentation of these messages may not affect subjects' feelings regarding the salience of attitude toward the brand. The fear of the advertising industry—that counter advertising severely undermine the marketplace effectiveness of advertised products—is not supported by the present research. Of course, subjects viewed the counter-Bayer commercial only once in this study. The effectiveness of a counter advertising media saturation campaign has not been tested in this research and may hold greater promise for supporters of the recent counter advertising movement.
FOOTNOTES


8 Ibid., p. 248.

Ibid., pp. 357-358.


13 Lull, op. cit.
Table 1

Results of Three-Way Analysis of Variance
(with Repeated Measures) of Likert Scores

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A (Treatment)</td>
<td>142.99</td>
<td>4</td>
<td>35.75</td>
<td>1.48</td>
</tr>
<tr>
<td>B (Use)</td>
<td>376.34</td>
<td>1</td>
<td>376.34</td>
<td>15.17**</td>
</tr>
<tr>
<td>AB</td>
<td>132.93</td>
<td>4</td>
<td>33.23</td>
<td>1.38</td>
</tr>
<tr>
<td>Subj w. groups</td>
<td>2368.21</td>
<td>98</td>
<td>24.16</td>
<td></td>
</tr>
<tr>
<td>[error (between)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Within subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C (Time)</td>
<td>30.26</td>
<td>1</td>
<td>30.26</td>
<td>8.25*</td>
</tr>
<tr>
<td>AC</td>
<td>9.10</td>
<td>4</td>
<td>2.28</td>
<td>0.77</td>
</tr>
<tr>
<td>BC</td>
<td>0.56</td>
<td>1</td>
<td>0.56</td>
<td>0.19</td>
</tr>
<tr>
<td>ABC</td>
<td>12.90</td>
<td>4</td>
<td>3.23</td>
<td>1.09</td>
</tr>
<tr>
<td>C X subj w. groups</td>
<td>289.22</td>
<td>98</td>
<td>2.95</td>
<td></td>
</tr>
<tr>
<td>[error (within)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* P < .01
** P < .001