Exploring the Comparative Communications Effectiveness of Advertising and Public Relations: An Experimental Study of Initial Branding Advantage

Paper by

David Michaelson
Principal
David Michaelson & Company
New York, NY

Don W. Stacks
Professor
School of Communication
University of Miami
Coral Gables, FL

Published by the Institute for Public Relations
June 2007
**David Michaelson**, Ph.D., has over 25 years experience conducting high quality, actionable research for Fortune 500 companies including Johnson & Johnson, Merrill Lynch, Coca-Cola and AT&T. Michaelson won two Silver Anvils from the Public Relations Society of America and two honorable mentions for best use of research from *PRWeek*. Prior to founding his own firm, Michaelson was Managing Director and Head of Research for Ogilvy Public Relations Worldwide. He served as Managing Director at GCI Group and Director of Research at Burson-Marsteller. He holds a Ph.D. from the New School for Social Research and is a Phi Beta Kappa graduate of the University of Massachusetts. Michaelson is a member of the Commission on PR Measurement & Evaluation.

**Don W. Stacks**, Professor and Director of the University of Miami School of Communication Program in Public Relations, received his Ph.D. from the University of Florida in Communication Studies in 1978. After graduating from Northern Michigan University (B.A. in English/Speech), he served in the U.S. Army as an intelligence briefer and production specialist. During this time he co-founded the Journal of Applied Communication Research. In 1975 he received an M.A. from Auburn University (Speech Communication). Stacks previously taught at the University of South Alabama and the University of Alabama-Tuscaloosa, with visiting professorships at the University of Georgia and the University of Alabama at Birmingham. Stacks is a member of the Commission on PR Measurement & Evaluation, and a Trustee of the Institute for Public Relations. Teaching honors include the University of Miami's Professor of the Year Award. Research awards include the University of Miami's Provost Award for Scholarly Activity, the Institute for Public Relations' Pathfinder Award, and PRSA's Jackson Jackson and Wagner Behavioral Science Prize.
Exploring the Comparative Communications Effectiveness of Advertising and Public Relations: An Experimental Study of Initial Branding Advantage

David Michaelson and Don W. Stacks

Abstract

The presence or absence of a public relations multiplier has long been controversial. This study sought to try and establish if such a multiplier exists through a carefully controlled experiment with “real” participants, and if so, what its magnitude might be in a comparison of an initial branding campaign. Experimental–control group analyses indicated that the advertising and public relations manipulations were successful; however, comparisons between advertising and public relations failed to find but one significant difference – with the public relations group perceiving the product more similar to (homophilous to) them than those in the advertising group. The research did find that the public relations group scored consistently, but non-significantly higher on almost all measures and that their decision-making was focused on higher levels of overall product knowledge.

Background

It has long been held by public relations practitioners that public relations media placement have a relative value advantage over advertising when the messages employed by both are similar. Those arguing for such an advantage claim a “multiplier” of perceived impact on readers and report the magnitude of such a multiplier has reportedly ranged anywhere from 2.5 to 8.0 time that of an equivalent advertisement (Weiner & Bartholomew, 2006). There is no available documentation of this multiplier and a review of extant literature calls into question not only the range of such a multiplier but also whether the effect exists at all.

Issues with Previous Research

A close examination of the literature finds three prevailing issues impacting on the validity and reliability of published studies examining “the multiplier effect.”

Methodological Issues

The first issue concerns the type of research conducted. Basically, the available literature can be defined by method employed. The methods employed range from anecdotal to opinion to social scientific. It should not be surprising that the anecdotal supports the existence of a value-added multiplier (e.g., Ivison, 1995; Ruff, 1968). The social scientific approaches however have failed to find support for something that has been a part of public relations lore for almost half a century (Cameron, 1994; Hallahan, 1999; Jo, 2004; Loda & Carrick, 2005; Schmidt & Hitchon, 1999; Schumann, Hatheote, & West, 1991; Straughan, Bleske, & Zhao, 1996; van Reijmersdal, Neijens, & Smit, 2005).

Based on these limited findings, Lindenmann (1997) and Grunig (2000) questioned the existence of a multiplier effect. As Grunig (2000) points out, the experimental research to date has been confounded by methodological and design problems. First, the research is focused almost entirely on college students. The Ivison (1995) and Ruff (1968) anecdotal research are the only studies which actually employed active participants in the promotional
process – potential customers contact with a client who were asked where they got their information from (advertising or publicity). Hence, Ivison and Ruff’s findings, while uncontrolled, did focus on a customer who had an interest in gaining something through the active processing of either advertisement or editorial commentary. The social scientific research reported earlier, while more controlled, focused on students projected use of advertisements or editorial commentary with little reporting of whether the students were active media users.

**Experimental Issues**

Second, the social scientific research, while purporting to be “truly experimental” has actually used less rigorous quasi-experimental designs (c.f., Campbell & Stanley, 1953) and is not programmatic in nature. Issues regarding experimental design may seem academic and exotic, yet are the grist of whether a variable (promotional type – advertisement or editorial commentary) actually impacts on consumer decision-making.

A true experiment must meet three criteria: (1) a tightly controlled situation where other, extraneous sources of influence can be ruled out, (2) the random assignment of participants to experimentally manipulated conditions (e.g., exposed to advertisement or editorial content), and (3) employment of control group that receives no manipulation. In such a situation eight “sources of experimental invalidity” can be controlled for and whatever results obtained can be demonstrated as being caused by the manipulated variables.

Extant experimental research focusing on the multiplier effect meet the first two criteria, but are limited by the lack of true control groups. Further, the research conducted to date has been isolated and not part of a larger, programmatic approach to understanding and predicting when such an effect might come into play.

**Theoretical Issues**

Third, there has been little theoretical rationale supporting the existence of a multiplier effect. With the exception of Cameron (1994) and Hallahan (1999), most research has focused on the impact of advertising versus public relations without a clear theoretical underpinning. Most of this research has focused on the role of both in the context of Integrated Marketing Communications (IMC). Their research focus has been on understanding the impact of publicity from an “implied third-party endorsement” perspective which proposes that editorial coverage in the news has greater credibility because of perceived journalistic endorsement of the product, organization, or concept. It may be that consumers also perceive journalists as objective reporters; hence, they are more trustworthy in their reporting of a promotional object’s strengths and weaknesses.

The hook of third-party endorsement is that it underlies much of what public relations serves to do. Research, however, has focused on more complex experimental designs that have not allowed for a programmatic, variable by variable approach; focusing instead on answering all possible questions simultaneously (e.g., Hallahan, 1999). Furthermore, third-party endorsement focuses on professional rather than interpersonal effects – focusing on the role of public relations as targeting the media and not an intended consumer audience. Contemporary media theory (23% of customers, 2007) suggests that
media effectiveness relies more on establishing an interpersonal relationship – a mediated “word of mouth” or consumer-generated media marketing approach.

Third-party endorsement does provide the gist for a multiplier model suggesting that any effect is dependent on five factors – situation, exposure, frequency, messaging strategy, and nature of communication (Stacks, 2007). The interaction of these five factors should yield differing levels of multiplier. Situation refers to the type of public relations being practiced – marketing to corporate. Exposure refers to whether the promotional materials stand alone or are cluttered amongst other materials. Frequency refers to the number of exposures recipients receive during a promotional campaign. Messaging refers to both target audience and whether the messaging is planned or unplanned (i.e., crisis response). Finally, communication nature refers to whether the promotional materials are controlled or uncontrolled by the practitioner. The proposed multiplier effect(s) is laid out in Table 1.

### Table 1

**Assumptions Influencing a PR Multiplier**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Lowest Multiplier</th>
<th></th>
<th></th>
<th>Highest Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Situation</strong></td>
<td>External/Branding</td>
<td>External/Branding</td>
<td>External/Branding</td>
<td>Internal/Branding</td>
</tr>
<tr>
<td><strong>Exposure</strong></td>
<td>Single, Stand alone</td>
<td>Cluttered</td>
<td>Cluttered</td>
<td>Single</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>Initial</td>
<td>Initial</td>
<td>Single</td>
<td>Multiple</td>
</tr>
<tr>
<td><strong>Messaging</strong>*</td>
<td>Planned</td>
<td>Planned</td>
<td>Unplanned/Crisis</td>
<td>Planned</td>
</tr>
<tr>
<td><strong>Controlled/Uncontrolled</strong></td>
<td>Uncontrolled</td>
<td>Uncontrolled</td>
<td>Uncontrolled</td>
<td>Controlled</td>
</tr>
</tbody>
</table>

*Messaging associated with specifically targeted audiences – employees, governmental, NGOs, etc.

### A Pilot Study

In 2004 Michaelson and Stacks reported a true experimental study on the multiplier effect. Employing a 2 x 4 experimental design with offset control, they examined the impact planned promotional messages for an initial branding effort across media type in controlled conditions. The basic research question asked *how important was media type of decisions to purchase a product*. The media types employed were editorial commentary, print advertisement, radio
advertisement (all uncluttered), and web page advertisement (cluttered by nature of the format). Dependent variables included message recall, message credibility, product rating, and product interest.

Students from a moderate-sized Southeastern university were randomly assigned to experimental or the control group and exposed (experimental groups) or not exposed (control group) to one of the four media types. Experimental materials were professionally designed copy and graphics and included one test product (Ponsef, a created water product) and two other products. Students received experimental packets that counter-balanced so that no one product was emphasized and were provided as much time as needed to complete the dependent measures. Initial analyses found that the student sample’s media use identical to the normal population. No significant differences (alpha set \textit{a priori} at \( p = .05 \)) were obtained across media type on any dependent variable, nor were the experimental groups different from the control group.

At first blush these findings reflect earlier experimental results. However, the study failed to address several issues allowing for a test of the multiplier effect. First, the sample was small and consisted of students. Power analyses indicated that the sample size was large enough to detect differences (\( \beta = .50 \)), thus small sample size can be eliminated as confounding factor. Second, the dependent measures, while identical to those used in the business community, were single item indicators; hence, measurement reliability and validity could not be assessed. Thus, we cannot be certain whether the experiment was a valid test of the multiplier effect. Finally, no indices of credibility, central to third-party endorsement theory, were employed in the study.

Experimental Test of Multiplier Effect in an Initial Branding Situation

Based on the foregoing discussion a new experimental study was undertaken as the first study in a series seeking to establish the effect (if any) of a multiplier effect. The current study focused on a single, stand alone exposure, with a single initial frequency planned exposure. The media type employed would be uncontrolled if found in the “real world,” but is actually controlled by experimental method.

Independent and Dependent Variables

The study sought to test print media only. The situation placed participants into one of two experimental groups – exposure to a single advertisement or to a single editorial commentary – or a no-message control group. The product chosen to test was created as similar to the pilot study’s water product and introduced as an initial branding campaign for a product with no bias toward it or any other brand preferences. The product, “Zip Chips,” was a snack food that contained no sodium or fats. A full-color ad with the tag line “Nothing but taste” was created by an award-winning advertising consultant. An editorial commentary was created that matched those found in The New York Times product testing section under the headline “New Chips ‘Totally Healthy’ and ‘Guilt Free’” (see Figures 1 and 2). Both materials were submitted to professional review before being employed.

Several dependent variables were created according to measurement theory. Two variables were created. The first focused on the \textit{ethos} or believability or trust in the product
along the authoritativeness (e.g., respect, intelligence, and information) and character dimensions (e.g., honesty, reputation, pleasantness or goodness) of credibility (McCroskey & McCain, 1974). A second measure, homophily, measured the similarity between a source and an individual as a second measure of third-party endorsement and was developed along two dimensions suggested by organizational literature (McCroskey, Richmond, & Daley, 1975), attitudinal homophily (e.g., reflecting how people think about others as similar to themselves) and behavioral homophily (e.g., reflecting how people expect to behave as similar to themselves). Each measure employed a 5-point Likert-type measure with statements being responded to on a strongly agree to strongly disagree continuum.

Figures 1 & 2

Additional dependent variables reflected the marketing communication function of branding – product awareness (knowledge of brand, depth of information) and purchase intent (stated likelihood that a product will be purchased).

Research Design

The research design employed a 2 x 1 field experimental design with offset control. The design employed a monadic study of people in the “real world” who were randomly exposed to either a message (public relations editorial commentary or advertisement) or no-message control group. A sample of 351 adults who read a newspaper at least once a week was obtained through a field interview process at five mall locations throughout the continental United States in March 2006 (Baltimore, MD; Duluth, GA; West Dundee, IL; Fort Worth, TX; and Santa Ana, CA) was collected by International Communications Research, a professional interview firm. Three hundred participants were randomly placed in either the advertising or public relations experimental groups; 51 participants were
randomly assigned into the no-message control group condition, which served to test the manipulation and provided indices of experimental validity.

**Results**

The data were weighted by cells to make sure that the respondents were in their correct proportions according to key demographic variables, professionally coded and entered into Excel spreadsheets and then transferred to the *Statistical Package for the Social Sciences* (SPSS), version 14.0. For inferential analysis an alpha of .05 was set for statistical significance.

**Psychometric Analysis**

The dependent variables for credibility and homophily were submitted to factor and reliability analysis. For both credibility and homophily, a two factor solution was obtained from a principle components factor analysis with Varimax rotation. (The criteria for inclusion in a factor were an eigenvalue of 1.00, scree-tested with item requirements of ±.60 with no secondary loadings of ±.40 greater.) The variables were then submitted to coefficient alpha scale reliability analysis (Cronbach, 1951); all four scales yielded reliability coefficients of .90 or greater. Thus, the variables were considered valid and reliable indicators of credibility and homophily. The product awareness and purchase intent variables were traditionally created marketing communication single item variables.

**Findings**

An initial test found the manipulations to be significantly different from the control group across all analyses. In general, we found that there are differences between advertising and editorial commentary, but these differences are not the difference expected.

What we found was that both the editorial and the advertisement were equally effective in promoting the product, but no statistically significant differences existed between the editorial and the advertisement across measures of awareness, information, intent to purchase, and product credibility.

After exposure to the test advertisement and the test editorial, Zip Chips brand recognition was significantly higher than five competitors that were all major national brands. However, there was no statistically significant difference between the advertisement and the editorial for brand awareness (see Figure 3). There was significantly greater awareness than in the control group, thereby confirming the experimental manipulation of the research design.

---

1 Weighting was operationalized as respondents reading or newspapers on the following frequency, weekly or more often.

2 Ruffles, Lays, Sun Chips, Fritos, Doritos
In addition to this lack of statistical difference on awareness, there was also no statistically significant difference between the group exposed only to the advertising and the group exposed only to the editorial on the overall believability of the information (see Figure 4).

We also found there was no statistically significant difference in purchase interest or brand preference between those exposed to the advertising and those exposed to the editorial (see Figure 5). However, those reading the editorial showed less variance in overall purchase interest (see Figure 6).
We did find one significant difference – those reading the editorial saw the product more closely related to their lifestyles than those reading the advertising and this appeared to be related to higher levels of overall knowledge about the product from exposure to the editorial (see Figure 7).

Even with this key difference, we still failed to find a “multiplier effect.” This occurred even though we had the perfect, positive editorial review of our product.

Discussion

We believe there are several key lessons from these findings. First, while a “multiplier” may exist in some circumstances, it is not universal and does not exist across all public relations media relations activities (i.e., Table 1). Second, the number of exposures,
editorial tone, ability to control the message, and the context of the communications may influence the “multiplier effect.” Third, although we hear of “multipliers” ranging up to 8 times advertising, if they do exist, they are probably dramatically lower than the anecdotal estimates and will vary significantly by context, environment, and practice.

The challenge is interpreting these findings as either positive or negative for the public relations profession. Our view is that this study demonstrates that editorial placements have equality with advertising. The business implications of this are that public relations should be afforded significantly higher stature in the marketing communications mix by receiving the same support and financing as advertising, direct marketing and other marketing communications disciplines. The preliminary findings also offer support to proactively promote public relations position in the marketing mix at the least and, with more study, probably demonstrate increased effectiveness as we better understand how the multiplier works, if it truly exists.

In the initial research, we exposed newspaper readers to either a news story or an advertisement and measured their reaction against a series of discrete measures. The findings revealed that independently, the editorial and the advertisement performed equally on almost all key measures.

The next step in this study is to determine the “real world” interaction effect. There are two basic interaction effects. The first is that consumers see these communications in the context of a publication where this information is surrounded by other articles and advertisements. The other interaction is that public relations placements and advertising often appear in the same publication or at the same time, so the consumer is likely to be exposed to both forms. These factors are key considerations that may help optimize the use of both public relations and advertising to achieve the greatest possible effect. A second factor is the timing of a promotional or branding campaign. This study provided only an
initial exposure to the key messages – something that would probably occur over time in an actual campaign. Future research can game this situation by simulating multiple exposures, randomly placing individual and cluttered exposures over a sequenced series of events.

Finally, the nature of the business itself may impact on a multiplier effect. That is, unlike advertising, which is arguably highly correlated with the marketing industry, public relations takes on other forms and is found in other contexts. Corporate communications, for instance focuses on both external and internal audiences, thus its practitioners have greater control over placement and clutter. In advocacy situations the impact of third-party endorsement may boost message impact – depending of course on the message topic and advocacy position taken (positive, neutral, or negative) and whether the messaging is proactive or reactive. There is a body of research that, like that cited earlier, offers conflicting findings for a multiplier effect (e.g., Jo, 2004; Loda & Coleman, 2005; Schmidt & Hitchon, 1999; Straughan, Bleske, & Zhao, 1996).

The existence, role, and scope of a public relations multiplier continues to be elusive. This study found that in an initial branding effort that public relations across the board had little impact except for message homophily and reduced variance in participant responses. It did provide an initial test of “real” people’s reactions to a branding campaign. Future research building on these findings is currently underway.

References


