

Exploring the Link Between Volume of Media Coverage and Business Outcomes

by

Angela Jeffrey, APR
Vice President Editorial Research, Video Monitoring Services, LP

Dr. David Michaelson
David Michaelson & Company, LLC

Dr. Don W. Stacks
Professor, School of Communication
University of Miami

Members, Commission on Public Relations Measurement & Evaluation

Published by the Institute for Public Relations
November 2006

Exploring the Link Between Volume of Media Coverage and Business Outcomes

Angela Jeffrey, Dr. David Michaelson, and Dr. Don W. Stacks

Angela C. Jeffrey, APR, is Vice President Editorial Research, VMS, and a member of the Commission on PR Measurement & Evaluation. Jeffrey spent two decades in PR, advertising and marketing with the J. C. Penney Company and major national agencies before starting Jeffrey Communications. She founded PRtrak to provide automated media analysis reports. In 2002, she sold the firm to Surveillance Data, Inc., which enhanced the platform by adding "Share of Discussion" analysis. In 2005, New York-based VMS (Video Monitoring Services) acquired PRtrak. She has won several PRSA Silver Anvils and IABC Gold Quills, and in 2006 was named a finalist for *PR News* "PR Measurement Person of the Year." In addition, her firm shares in Porter Novelli's 2006 Jack Felton Golden Ruler Award for excellence in public relations measurement and evaluation. Angie graduated summa cum laude from Southern Methodist University with a BFA in Journalism and BBA in Marketing.

David Michaelson, Ph.D., has over 20 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.

ABSTRACT

Since the founding of public relations, practitioners have intuitively believed in the power of positive unpaid media to affect behavioral goals. But does it really work? If so, how much coverage is needed? This paper suggests a strong relationship between coverage volume and business outcomes, with three case studies looking at volume alone, tonality-refined volume, and message-refined volume.

Exploring the Link Between Volume of Media Coverage and Business Outcomes

By Angela Jeffrey, David Michaelson & Don Stacks

Copyright © 2006, Institute for Public Relations

www.instituteforpr.org

INTRODUCTION

Since the founding of public relations as a discipline, practitioners have intuitively believed in the power of positive unpaid media¹ to affect the cycle of *awareness, knowledge, interest and intent*² that is needed to achieve behavioral goals. Edward Bernays, who is often referred to as “the Father of Public Relations,” demonstrated the way to manipulate public opinion was through the indirect use of “third party authorities,” such as the media:

“If you can influence the leaders, either with or without their conscious cooperation, you automatically influence the group which they sway.”³

While the field of public relations has matured far beyond this early one-way model of communication, influencing the media remains the largest focus of the \$5.4-billion worldwide PR industry today.⁴

But does it really work? And if so, how much media coverage is needed to affect change? Like the old adage, “*if a tree falls in the forest, and no one is around to hear it, does it still make a sound?*”... is a company successful because it builds a terrific product or behaves as a good corporate citizen, or because people know about these things through the communicated word? What good is the most provocative message if no one hears it?

This paper will explore the importance of **media coverage volume** in the effectiveness of a public relations program. According to the The Dictionary for Public Relations Measurement and Research, “Public Relations Effectiveness” is “*the degree to which the outcome of a public relations program is consonant with the overall objectives of the program as judged by some measure of causation*”⁵. While the challenge is truly finding ‘proof of cause’ in any PR campaign, we can still look for a “preponderance of evidence” of a meaningful relationship (correlation) between two variables. In this paper, the relationship would be between coverage volume and business outcomes⁶, such as medical procedures, sales and prescription volume.

¹ “Unpaid media” or “earned media” refers to news or editorial coverage that has not been purchased as advertising or advertorial.

² *A New Model for Media Content Analysis* by David Michaelson of David Michaelson & Company and Toni L. Griffin of MetLife, available through the Institute for Public Relations, www.instituteforpr.org.

³ *Edward Bernays (1891 - 1995) as quoted in his 1928 book Propaganda.*

⁴ Council of Public Relations Firms 2002 Industry Fact Sheet; www.prfirms.org.

⁵ *The Dictionary for Public Relations Measurement and Research* by Dr. Don Stacks of the University of Miami, available through the Institute for Public Relations, www.instituteforpr.org.

⁶ Outcomes are defined in *The Dictionary for Public Relations Measurement and Research* as “quantifiable changes in awareness, knowledge, attitude, opinion and behavior levels that occur as the result of a PR program or campaign.” “Business Outcomes” would refer to behavior changes such as an increase or decrease in sales, store traffic, product queries, intent-to-purchase, etc.

This topic may appear to be very basic and fundamental, but it has not been addressed with specific evidence to date.

The case studies presented in this paper are among almost 200 executed over the past four years by a leading media research firm⁷. These studies involved an analysis of more than 10 million news articles that compared the **quality and quantity** of client media coverage with business outcomes⁸. While most of these studies focused upon *share* of qualified coverage between competing organizations, the data yielded insights about the subject of volume itself, and the variables that affect its impact.

MEDIA COVERAGE VOLUME METRICS

In order to better understand the issue of media coverage volume, it is essential to look at the various ways it is measured today.

Clip Counting – This is the most common, and most basic, way to measure volume. Articles are simply collected, sorted by subject or by date, and counted regardless of the size or quality of the story itself. Because it offers no qualitative information, it can be severely misleading as a measure of success. According to a 2003 *PR News* survey, "Attitudes toward Public Relations Measurement & Evaluation"⁹, a full 84% of respondents cited clip counts as their main method of measuring.

Audience Impressions – This is the second most commonly used method today, and consists of collecting print circulation figures, broadcast gross impressions and Internet "daily average visits," and totaling them up as an estimate of audience reached. Various permutations exist, such as multiplying circulation figures by estimated pass-along rates. New research shows that using audience impressions to gauge effectiveness may be 12.4% more accurate than story counts¹⁰ when correlating to outcomes; however, impressions can also mislead, since the size/duration of the story, and quality of the placement itself, is not considered. In the survey mentioned above, 51% of respondents claimed utilizing this method.

Media Value – Formerly referred to as "ad value equivalency," "media value" refers to the practice of multiplying the space or time occupied by a story by advertising costs, and totaling them as a measure of success. While there is no 'equivalency' between the impact a story might have versus that of an ad, new research¹¹ shows that the information embedded in market-driven advertising costs do improve correlations between media coverage and business outcomes by 25.6% over clip counts, and 12.4% over impressions. However, while this method does capture the size/duration of a story,

⁷ PRtrak actually pioneered this research in the late nineties. It continues today under the auspices of VMS, which purchased PRtrak in September of 2005.

⁸ See definition of "business outcomes" in Footnote #6.

⁹ "Attitudes toward Public Relations Measurement & Evaluation," a survey sponsored by PRtrak and published by PR News; designed and executed by David Michaelson, Ph.D, of David Michaelson & Company, LLC, and October, 2003. www.instituteforpr.org.

¹⁰ "Close Correlations" white paper summarizes research done to compare the accuracy of using clip counts, audience impressions and media value when correlating to outcomes, from VMS, available at www.vmsinfo.com.

¹¹ "Close Correlations," as above.

and is a good measure of prominence¹², it lacks other qualitative factors such as tone, message appropriateness, etc., so is not an adequate measure alone. Media value was used by 45% of respondents in the *PR News* survey.

Qualified-Volume Measures – More progressive and accurate measures of media coverage volume include counting and comparing only those articles that have been “qualified” by factors such as:

- Tonality
- Prominence
- Target audience reached
- Contains key messages
- Contains accurate messages
- Contains messages placed within proper context
- Size or duration
- Dominance, and so on ...

While qualified-volume scores will always be lower in absolute value than non-qualified, they usually correlate much better to business outcomes than raw counts.

Media Analysis Indices – In an attempt to marry the best quantitative measures (clip counts, impressions or media values) with the best qualitative measures (tone, prominence, message, etc.), more and more analysis firms are offering single-metric indices such as the *VMS PRtrak Media Prominence Index™*, the *Delahaye Impact Score* and the *Carma Favorability Rating System*. While no metric is perfect, media indices do go a long way toward qualifying coverage volume in terms that are meaningful, and certainly toward equalizing it for competitive analysis.

Share of Media Coverage – Finally, we must consider share of media coverage volume as a metric growing in importance today. As we will explore in a subsequent paper, overall coverage volume may have less to do with business outcomes than relative share of volume among competitors.

ISSUES TO BE EXPLORED

While this paper will not attempt to address every variable discussed above, it will explore the importance of two of them: Tonality and Message, and how they modify the effect of pure volume.

METHODOLOGY

The case studies that follow were executed through an advanced linguistics, artificial intelligence tool with human-like text analysis capabilities¹³ that enabled the automated scoring of tone. Because of this technology, studies that would have normally been cost-prohibitive due to large clip volumes were done quickly and economically. The goal

¹² “Advertising Value Equivalency,” an IPR Commission on PR Measurement and Evaluation white paper, by Bruce Jeffries-Fox; www.instituteforpr.org .

¹³ This analysis tool is part of VMS’ PRtrak measurement system; www.vmsinfo.com .

of these case studies, along with almost 200 others, was to determine how changes in public discussion (unpaid media) correlated to changes in business outcomes. These cases utilize sales, prescription volume and medical procedures as examples of desired, and undesired, business results.

Print, broadcast and Internet articles were imported into the Ai system from Lexis Nexis, Factiva and other electronic sources. Only the portions of each clip that were actually 'owned' by a client organization were counted for credit, and scored qualitatively and quantitatively. The examples that follow utilize Clip Counts, Impressions, and the Media Prominence Index™, with Pearson Product Moment Coefficient (r)¹⁴ correlation comparisons to results.

CASE STUDIES

Study One: Pure Volume

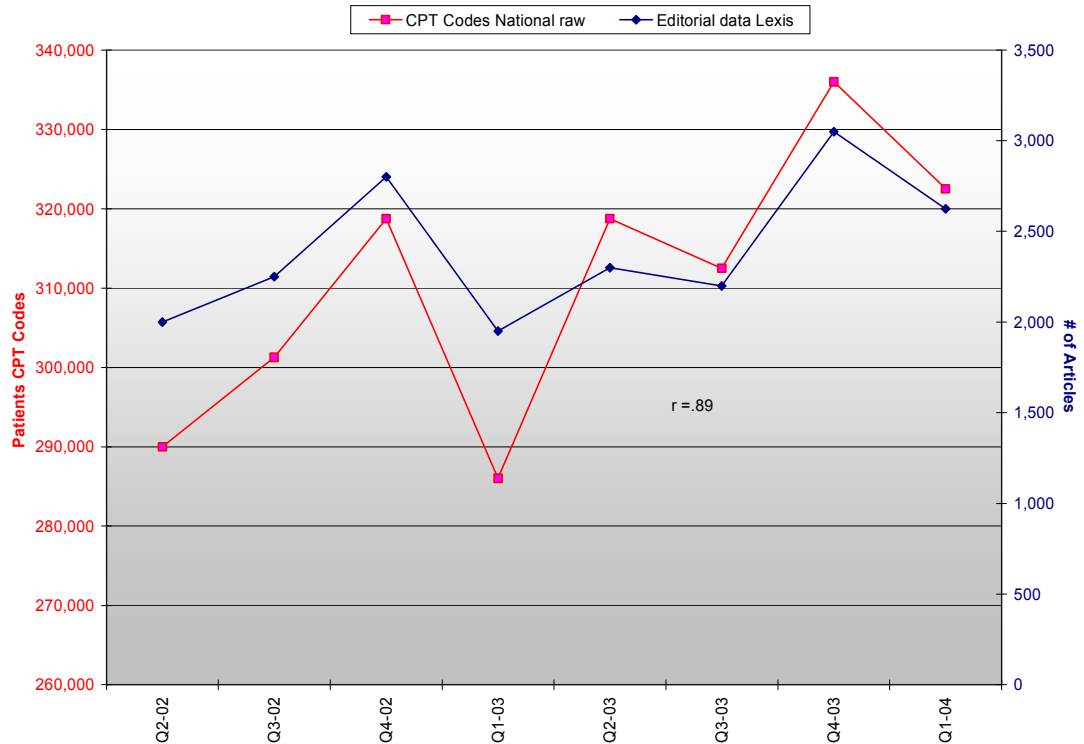
The graph below illustrates a study for a healthcare organization that had extensively publicized the importance of mammograms, but didn't know if the effort had achieved its objective of driving patients to doctors' offices for medical procedures. The campaign included no paid media or promotional activity, so was completely dependent upon media coverage.

The five-quarter study analyzed 47,000 articles, all of which carried clear messages of the importance of mammograms for the early detection of cancer. This was a particularly simple study in that the message itself was essentially neutral and factual, and therefore resonated well with the media. Also, there were no competitors with dissenting messages. The volume measurement used in this study was simple Clip Counts.

As illustrated in the chart that follows, the correlation between editorial coverage for this campaign and mammograms was a very high $r=.89$. Thus, it appears that there is a strong relationship between media coverage and business results, since procedures increased as the volume of press went up, and decreased when it went down.

¹⁴ The Pearson Product Moment Coefficient is a measure of association that describes the direction and strength of a linear relationship between two variables; it is usually measured at the interval or ratio data level. Definition is from *The Dictionary for Public Relations Measurement and Research* by Dr. Don Stacks of the University of Miami, available through the Institute for Public Relations, www.instituteforpr.org. Pearson Correlations were preferred by the authors of these studies since the qualitative data in social science research is inherently less precise.

Correlations between Editorial Coverage for Mammography and Corresponding Medical Procedures (CPT Codes)



Study 2: A Closer Look at Tonality

What we've demonstrated above is relatively simplistic: that in some cases where tonality and message are neutral and straightforward, a clear correlation exists between editorial volume and outcomes. But such an ideal situation is rarely the case in the real world.

This next study deals with the issue of negative news, which has an *inverse* correlation to desired outcomes. The old adage of, "there's no such thing as bad publicity," is clearly untrue. Bad publicity happens, and with it, undesired results.

On January 6th of 2006, The American College of Chest Physicians released a report saying that cough medicines were ineffective: "*There is no clinical evidence that over-the-counter cough expectorants or suppressants relieve cough.*" The articles went on to say that *allergy* medications *were* effective, however, due to their drying effects. This news story was immediately covered by all the major TV broadcasts (World News Tonight, Today, Early Show, Good Morning America) and most of the daily newspapers.

Exploring the Link Between Volume of Media Coverage and Business Outcomes

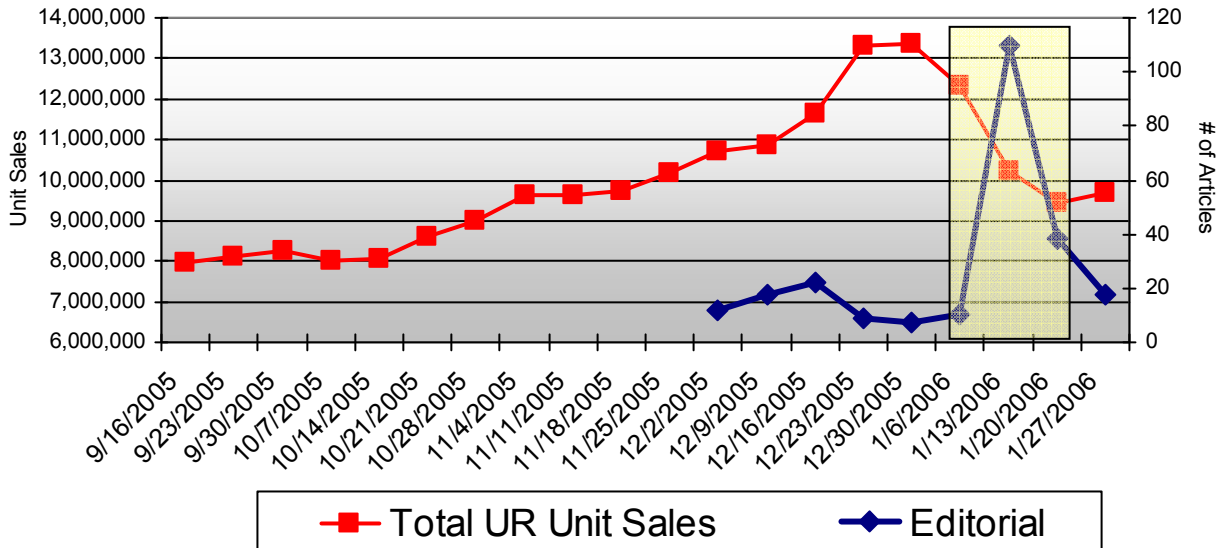
By Angela Jeffrey, David Michaelson & Don Stacks

Copyright © 2006, Institute for Public Relations

www.instituteforpr.org

Regarding other marketing efforts, there was no change in any marketing mix variable during the short time period during which this news hit and sales dropped.

Negative News on Cough Syrups Coincides with Severe Drop in Cough Segment Sales



The chart above illustrates the immediate impact of the surge of negative stories (blue line) on cough syrup unit sales (red line) in a very short time period. (Note: cough syrup sales had already started downward in December, which is standard during the Holiday Season; but the *rate* at which they dropped after the news broke, and the *degree* of the loss, was unprecedented). It also shows a slight rebound in sales once the volume of negative news eased up. The measurement metric used in this study was Tonality-Qualified Clip Counts, and the number of stories was several hundred.

Interestingly, one client's bad news may be another's good news. Corresponding measures to this negative publicity included a 12% surge in physician visits for respiratory illness for the week ending January 14th; and, allergy medicine sales soared reflecting the positive news in that same story. Bottom line, whether the tone is positive, negative or neutral, it appears volume links closely with business results – though the desirability of those results is another issue.

Study 3: Is Tonality Enough? What about Message?

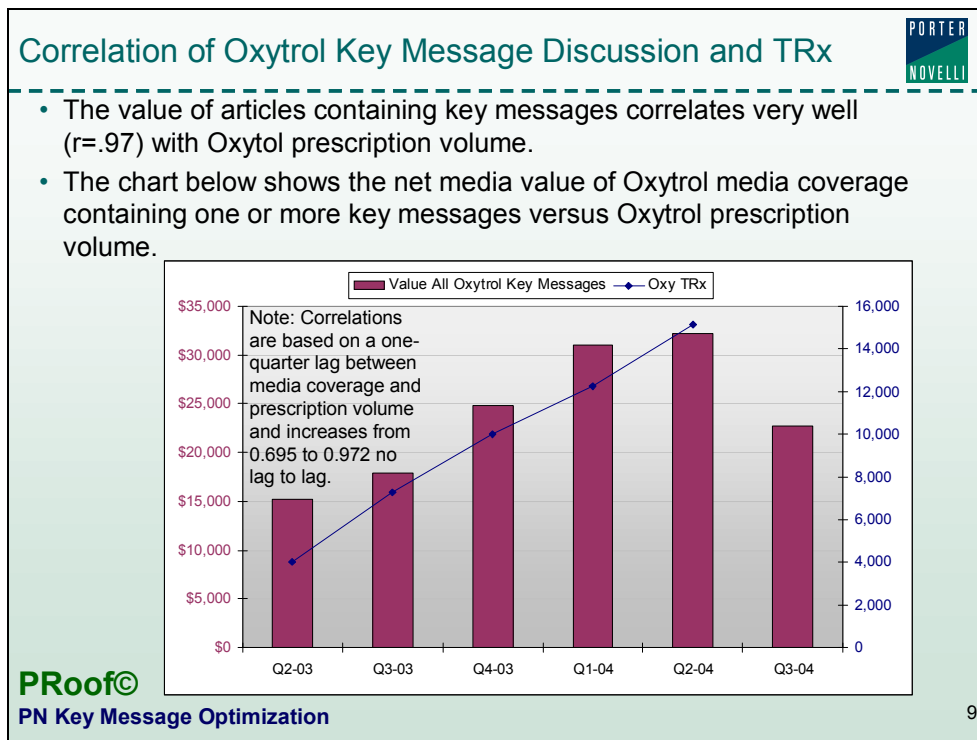
Here is an award-winning study from Porter Novelli¹⁵ illustrating how media coverage that simply mentions a brand, but does not deliver meaningful or accurate messages about that brand, may not have much impact. As with the other studies discussed above, this product was promoted solely through unpaid media.

¹⁵ Study was entitled PProof© - Porter Novelli Key Message Assessment & Optimization" for Watson Pharma, Inc. on OXYTROL, with VMS' PRtrak measurement system.

The product studied was a prescription medication for the treatment of overactive bladder, and the outcome measure was prescription volume. Some 3,000 articles were analyzed using a proprietary media index¹⁶ that accounted for tone. The overall correlation between the primarily neutral and positive coverage and prescriptions was modest ($r=.51$), suggesting that volume alone is not sufficient to produce desired results.

However, when coverage was limited to only that which contained *at least one key message*, and was then correlated to prescriptions, the r value soared to .97. Of further interest, only two of the six key messages appeared to be driving the results. Incidentally, this Porter Novelli study won the **2006 Institute for Public Relations Jack Felton Golden Ruler Award** for excellence in PR measurement & evaluation.

News with Key Messages Coincide with Prescription Volume



These Porter Novelli findings dovetail with work done by David Michaelson, Ph.D, and Toni Griffin in their paper, "A New Model for Media Content Analysis."¹⁷ Michaelson and Griffin found that "between 60 percent and 85 percent of articles on the key issues of concern to MetLife included errors in reporting, a misrepresentation of key information

¹⁶ VMS' Media Prominence Index utilizes Media Value refined by Tone and Prominence (of client in article).

¹⁷ "A New Model for Media Content Analysis," by David Michaelson of David Michaelson & Company, LLC, and Toni L. Griffin of MetLife, 2005; available at www.instituteforpr.org .

Exploring the Link Between Volume of Media Coverage and Business Outcomes

By Angela Jeffrey, David Michaelson & Don Stacks

Copyright © 2006, Institute for Public Relations

www.instituteforpr.org

or an omission of basic information that should have appeared in the context of the articles.”

Both studies illustrate the fallacy of considering a campaign a success if one gets lots of overall pick-up, and even “key-message” pick-up, without checking that the messages delivered were accurate and resonated well with the targeted audience.

INITIAL CONCLUSIONS

As stated earlier, this paper only skims the surface of exploring the relationship between media coverage volume and related business outcomes. It cannot lay claim to proof of causation in any of the cases above, since experimental research would be required to make that leap.

But it appears there is a preponderance of evidence that suggests a strong relationship between the two. Certainly Bruce Jeffries-Fox, former chair of the Institute for Public Relations’ Commission on PR Measurement and Evaluation, found similar results in a series of studies he did for AT&T several years ago¹⁸. At the conclusion of his work, he wrote, “These data suggest that exposure to prolonged and highly positive news coverage can positively impact consumers’ attitudes toward and perceptions of a company.”

IMPLICATIONS AND DISCUSSION

So media coverage volume matters; and, depending upon your business goals, tone and message also matter. Implications for the practice of PR seem obvious:

1. Establish clear, measurable business goals and objectives for your campaign.
2. Utilize formative research to establish key messages that resound with your targeted audiences.
3. Secure as much positive, on-message media coverage as is possible.

Implications for PR measurement and evaluation would include:

1. Measuring the volume of media coverage with Clip Counts may be sufficient for correlating relatively neutral, factual campaigns to business outcomes.
2. For more controversial, complex or commercial campaigns, volume can be better determined with more qualified measures that are sensitive to Tone and Message, if correlations are to be seen.

A second paper will follow exploring coverage volume in terms of competitive share, to see how relative volume plays into the mix.

¹⁸ “Toward an Understanding of How News Coverage and Advertising Impact Consumer Perceptions, Attitudes and Behavior;” by Bruce Jeffries-Fox of Jeffries-Fox Associates; www.instituteforpr.org .