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Publicity and advertising: what matter most for sales?

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Abstract

Purpose – The purpose of this research is to understand the relationship between publicity, advertising activity and corporate sales in the context of a company's existing reputation.

Design/methodology/approach – The study brings together four unique industry datasets and uses discriminant analysis and multiple regression methods to examine the relationship between existing corporate reputation, publicity, advertising activity and sales levels for major multi-national companies in the technology products sector.

Findings – Positive publicity is most important in distinguishing between firms with higher and lower sales. The effects of negative publicity and advertising are dependent on a firm's existing reputation. For companies with weaker reputations, positive publicity in tandem with business-to-consumer (B2C) advertising is most highly associated with higher company sales. Conversely, for firms with stronger existing reputations, advertising has a significantly diminished role; positive and even negative publicity are most crucial in distinguishing between companies with high and low sales. Negative publicity can be harmful to these firms though if it is not balanced by more positive publicity. Finally, the topic of news coverage is related to sales. Generally, stories that are positive reporting on business outcomes, leadership and business future and marketing practices are most important in discriminating between firms with stronger vs weaker sales.

Practical implications – For this set of technology product firms, publicity and advertising are relevant for sales. Firms with higher levels of sales have both more positive and negative publicity, but the volume of positive stories is much higher. Attracting negative publicity is common for firms that achieve higher sales, but it is offset by a greater number of positive stories, an aspect that public relations efforts can influence. B2C advertising spending meanwhile matters more for firms with weaker rather than stronger existing corporate reputations. It is most effective for firms with weaker existing reputations to maximize the positive signals in the marketplace as exemplified by positive publicity and B2C advertising efforts.

Originality/value – Little research has examined the relationship between different forms of corporate communications and sales; this study is a rare examination using publicity, advertising spending, existing reputation and sales in a durable goods and services context where there has been a particular dearth of even basic advertising studies. Beyond understanding the relative importance of publicity v. advertising, it also uniquely focuses on the individual topics of news publicity.

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Despite advertising's reputation for brand building, some pundits, marketers and academics have asserted that publicity plays a much more important role in marketing communications than advertising (Harris and Whalen, 2006; Ries and Ries, 2002; Kitchen, 1996). Further, there is increasing empirical evidence that publicity is important for building the corporate brand (Pollock and Rindova, 2003; Brown and Deegan, 1998). Yet, surprisingly, little research has been done about the relative and combined effects of publicity and advertising on sales, an important step for linking marketing communications activities to the bottom line.

In this study, we focus on understanding the interrelationship between publicity, advertising and sales for a set of durable goods and services firms. Different from consumer packaged goods firms (CPG) that focus on branding individual products, the durable goods and services firms (DG&S) in this study often focus on overall corporate branding. While there are numerous advertising effects studies and studies highlighting the important role of publicity for the corporate brand (Wartick, 1992), the relationship between a firm's existing reputation, advertising, publicity and sales is still unclear, and this is especially true for DG&S where such research is particularly sparse (Sethuraman *et al.*, 2011).

Many questions are unanswered: What is the relationship between advertising, publicity and sales? Does the tone of publicity, story topic or volume of news matter for performance? Does a better or worse corporate reputation influence the importance of publicity relative to advertising spending? and How does spending on consumer versus business advertising relate to company sales performance? To examine these questions for DG&S firms, this exploratory study uses four industry datasets to connect a firm's reputation, volume of media exposure, advertising spending and sales.

Background

Some economists and marketing researchers view marketing communications as *signals* that possess information content for stakeholders that can be used to judge a company (Basdeo *et al.*, 2006; Erdem *et al.*, 2006; Herbig *et al.*, 1994; Boulding and Kirmani, 1993). Advertising (Wind and Sharp, 2009; Rust *et al.*, 2004) and publicity (Deephouse and Carter, 2005) are potentially important signals to audiences and may play important roles in shaping the corporate brand (Brown and Deegan, 1998) and firm performance (Harris and DeChernotony, 2001). Yet advertising and publicity have different sources and content; these send different types of signals about the company that may ultimately affect sales differently.

Advertising data void

Traditional advertising is a signal that is under corporate control, always positive and well established as a core brand building mechanism. Past empirical studies mainly focused on advertising effects in business-to-consumer (B2C) contexts (Hanssens, 2009; Vakratas and Ambler, 1999; Lodish *et al.*, 1995; McDonald, 1992). From the 1960s to the early 1980s, studies that dominated the literature focused at the aggregate level on the overall influence of advertising, price and promotional elements on sales, market share and brand choice (see Vakratas and Ambler, 1999 for a review). The single-source data revolution that began in the

1960s spawned dozens of split cable studies in individual households on advertising's impact and lead to numerous empirical generalizations about how advertising worked. Although single-source advertising studies have many advantages for studying frequently purchased consumer goods, such data are not available for numerous products and services not tracked or studied in single-source research.

With no equivalent single-source data for DG&S firms, it is less clear whether the advertising generalizations that apply to consumer goods also apply in other important domains where the company is often the brand and the goods and services produced are business-to-business (B2B) or durable goods. Sethuraman *et al.* (2011) note that the advertising elasticity for durable products is significantly higher than that for non-durable consumer goods, a finding which lends support to Vakratas and Ambler's (1999) call for more attention in advertising research to context conditions such as product category. Further, despite the advantages of single source information for examining advertising effects, that data do not include publicity, which might be equally important for the corporate brand. In the spirit of this call, we examine the relationship between advertising, publicity and sales in the context of DG&S firms.

Publicity's impact

Publicity, generated by intermediaries such as reporters, bloggers and others, discusses a wider range of topics than advertising that affect organizational stakeholders by framing the firm in positive or negative terms (Golan and Wanta, 2001). It is considered to play a pivotal role in the reputation and branding process, but it is often left out of single-source studies of advertising effects (Eberl and Schwaiger, 2005; Gray and Balmer, 1998). As a result, relatively few studies examine the relationship between publicity, advertising, reputation and sales.

There is some evidence that audiences may weigh negative publicity more heavily when forming impressions, resulting in a "negativity bias" (Kanouse and Hanson, 1971). A variety of factors may temper or inflame consumers' reactions to negative information though (Nguyen and Romaniuk, 2013; Ahluwalia *et al.*, 2000; Weinberger, 1986), which may exacerbate or mitigate the influence of negative publicity. In a direct test of negative and positive information in impression formation, Fiske (1980) found extreme information, positive and negative, to carry more weight. However, moderate negative information was not more influential than moderate positive information. Contrary to negativity bias theories, this suggests that moderately negative or positive news coverage may actually have similar effects on audiences. This finding was replicated in the context of word of mouth (WOM) where researchers found equivalent effects for both positive and negative WOM for durable products (Charlett *et al.*, 1995) and services (East *et al.*, 2008). It has even been demonstrated that negative publicity reviews might have positive effects on sales (Berger *et al.*, 2010). Importantly though, research has not examined the direct relationships among positive and negative publicity, advertising spending and company sales.

Publicity issue coverage

At a micro-level, the role of the topic of positive and negative stories in signaling and shaping purchasing behavior has received scant attention. This is surprising, as one might expect the topic of a story to shape schematic knowledge about the firm (Carroll, 2004; Entman, 1989). The limited research in this area is contradictory though. Carroll's

(2004) findings on the influence of story topic on reputation were mixed. However, Aaker and Jacobson's (2001) analysis identified that news coverage of certain topics matters and is related to corporate brand attitudes and company performance. Based on their findings, Aaker and Jacobsen concluded that empirical research was needed to better understand the interrelationship between the topic of media coverage and the overall performance of the brand. A portion of the current study explores this connection between news topics and sales.

Direct evidence of advertising versus publicity effects

Discussions of advertising and public relations' influence suggest that public relation (PR) has become more dominant, yet limited academic research has examined the topic. In their meta-analysis of mostly experimental laboratory studies on advertising and publicity, Eisend and Kuster (2011) highlight the connection between publicity, customer attitudes and purchase intention. They suggest that the perception of credibility enhances publicity's importance. News media play a pivotal role in the communication signaling process, a view supported conceptually (Gray and Balmer, 1998) and empirically (Fombrun and Rindova, 1998). However, these studies stop short at understanding the relationship between company advertising, publicity and sales. Moreover, few examine the role of a firm's existing reputation.

Reputation, advertising and publicity

Although there is evidence that information is processed and interpreted differently based on existing reputations (Wartick, 1992; Heil and Robertson, 1991), it is unclear how a firm's existing reputation might influence the behavior of customers exposed to marketing communications. We argue that a firm's existing reputation, like a brand (Erdem and Swait, 1998), may be an important influence that works together with marketing communication signals such as advertising and publicity to influence stakeholders' behavior.

Hypotheses

The first hypothesis examines the interrelationship between publicity volume/valence, advertising spending and sales for durable goods and services companies of different reputational strengths. The second hypotheses focus more deeply on the relationship between the volume of positive and negative media stories in four major news topic areas and sales.

H1. Publicity volume/valence and advertising spending

Studies have examined the relative influence of advertising and publicity on cognitive and affective metrics such as brand attitudes. In their meta-analysis, Eisend and Kuster (2011) found that publicity is more effective than advertising in new product contexts and for existing products garnering net positive publicity. However, they note that evidence on the relative effects of advertising and publicity has been confined to laboratory studies that have not examined the relationship between these and behavioral metrics such as sales. Building on these past findings, we hypothesize that the volume of publicity (vs advertising) for a company will be more closely related to sales (*H1.1*).

Social cognition research provides theoretical guidance for the relative importance of the amount of news and advertising about a company. Volume of information has an

impact on impression formation (Fiske and Taylor, 1991) and judgment (Heath and Tversky, 1991), regardless of the content and valence of news stories. As volume increases exposure, familiarity is enhanced (Carroll, 2004), generating stronger liking (Zajonc, 1968) and increased acceptance of a statement (Hawkins and Hoch, 1992). Moreover, volume is positively related to availability, which reduces perceptions of riskiness (Heath and Tversky, 1991). The evidence about advertising weight suggests that it is important, but timing, creative content and other factors may also influence the effectiveness of advertisement spending (Lodish *et al.*, 1995; Blair and Rosenberg, 1994; Eastlack and Rao, 1986). Despite other potential influences, we still speculate that across firms, those with higher sales will have higher publicity volume and more advertising spending (*H1.2*).

Negative stories are almost inevitably part of a large firm's communication profile but may not necessarily be detrimental (Nguyen and Romaniuk, 2013). Barring extreme negative publicity, which might result in a negativity bias (Fiske, 1980), our expectation is that stakeholders will integrate positive and negative signals (Anderson, 1971) into a judgment that will reflect the relative balance between the volume of positive and negative news stories. When they have more positive than negative stories, firms will be more likely to have higher sales (*H1.3*).

Wartick's (1992) study of publicity identifies that media exposure has a different effect on companies depending on their existing reputation. Firms with *stronger* reputations benefited from a higher volume of media exposure resulting in larger, positive changes in reputation. For companies with *weaker* reputations, the volume of publicity about the firm was unrelated to reputation changes.

Publicity tone was more important for firms with *weaker* reputations; negative media coverage led to negative changes in corporate reputation only for weaker reputation companies. Wartick's results indicate that prior reputation might act as a filter through which new information flows, influencing the ways that stakeholders' perceptions evolve about a company. Building on Wartick's findings, we expect that firms with *weaker* existing corporate reputations (CR), but *higher* sales will also have more positive marketing communication signals (more advertising spending and more positive publicity volume) than firms with *lower* sales (*H1.4*).

For *stronger* reputation firms, expectations are more difficult to predict. The marginal impact of additional publicity or advertising should be positive (Micu and Thorson, 2008; Dawar and Pillutla, 2000) and reinforce a firm's positive reputation. However, there is strong evidence for ceiling effects in the advertising domain; more spending on advertising may not generate proportionally greater effects (Wind and Sharp, 2009; Lodish *et al.*, 1995; Jones, 1995, 2007). Thus, it is unclear whether more publicity and advertising would boost these firms in the way we expect for the *weaker reputation* firms.

Wartick's (1992) study of volume did not distinguish between positive and negative stories. It is possible that the effects of valence were averaged out in the results. This leaves the question open as to the type of volume effect he gauged. There may be a positive or negative publicity volume ceiling effect for the stronger reputation firms. While stakeholders or those committed to a brand may discount most negative publicity about a company (Ahluwalia *et al.*, 2000), it is possible that the relative amount of positive and negative exposure matters. It is also possible that both phenomena may occur; the publicity volume effect observed by Wartick may have masked a change in

the ratio of positive to negative stories. Considering past studies on advertising and PR effects, we hypothesize that, for *stronger* reputation firms, advertising may play a less important role in company sales success compared to publicity due to advertising ceiling effects (*H1.5*).

In summary:

H1.1. Publicity volume will be more significant than advertising in discriminating between firms with lower or higher sales.

H1.2. Firms achieving **higher** sales levels will have higher levels of positive and negative publicity and B2B and B2C advertisement spending.

H1.3. Firms with **lower** sales levels will have a greater or equal balance of negative to positive publicity volume. Firms with **higher** sales levels will have greater positive publicity volume than negative publicity.

H1.4. Among firms with **weaker** CR, publicity and advertising should be significant in distinguishing between firms achieving lower and higher sales levels.

H1.5. Among firms with **stronger** CR, publicity volume but not advertising should be significant in distinguishing between firms achieving lower and higher sales levels.

H2. Publicity and story topic

Research suggests that the topic of media coverage may also help to shape brand knowledge. The story topic may create, alter or reinforce deeper attribute knowledge and meanings:

> Brand equity is fragile because it is founded in consumers' beliefs and can be prone to large and sudden shifts outside of management's control because of consumers' exposure to new information, among other factors (Dawar and Pillutla, 2000, p. 215).

Given both the role that publicity may play in shaping stakeholders' perceptions (Carroll, 2004) and the story topic influences found by Aaker and Jacobson (2001), we expect that the topic of news stories will have a significant signaling effect for company sales. We use four general categories of publicity story topics, similar to categories developed by Fombrun and Shanley (1990) and Van Riel and Fombrun (2007) to measure the topics of corporate media coverage:

(1) *Ethical and Legal*;

(2) *Leadership and Business Future*;

(3) *Marketing Practices*; and

(4) *Business Outcomes*.

Ethical and Legal stories focus on corporate citizenship, crime/crises, legal, environmental and other regulatory issues. *Leadership and Business Future* captures stories about corporate vision, management, restructuring, acquisitions, research and development and other strategic issues. *Marketing Practices* focus on stories related to products and services, pricing, marketing and advertising and customer service.

Business Outcomes represents media stories on earnings, stocks, sales, market share and other business performance issues, a topic not tracked in prior research.

We expect that the volume of positive and negative news coverage within these four publicity topics will distinguish between firms that have higher and lower sales (*H2.1*). Because there is little research on the relationship between topical media coverage and business performance, our investigation is exploratory in nature. We do not present formal hypotheses on the relationship between specific topical coverage and sales; rather, our investigation focuses on the overall volume of positive and negative coverage for each of the four news topics. We expect that firms with more news coverage on each topic will have higher sales levels (*H2.2*) and that, for these firms, the proportion of stories on each news topic will be more positive than negative (*H2.3*).

More formally, we expect the following results based on the publicity topic:

H2.1. Publicity topics will successfully distinguish between firms achieving lower and higher sales levels.

H2.2. Firms in the higher sales group will have higher levels of positive and negative publicity in each of the publicity topic areas.

H2.3. For firms with lower sales, the volume of negative publicity should be higher than or the same as positive publicity on each of the story topics. For firms with stronger sales, the volume of positive publicity should be higher than negative publicity for all of the story topics.

Method

The first objective of this study is to examine the relationships between advertising spending, publicity volume/valence and sales for DG&S firms with different reputations. The second objective is to examine whether firms differing on sales performance are the beneficiaries of different types of publicity issue coverage. These objectives are investigated by integrating four separate industry data sources collected between January 1, 2000 to July 1, 2003. Similar to single-source research for consumer goods, the final dataset matched publicity, advertising, company sales and annual company reputation data by quarter for 14 multi-national technology companies. Firms in the study include AT&T, Cisco Systems, Computer Associates, Dell, EMC, Gateway, IBM, Intel, Microsoft, Oracle, PeopleSoft, Siebel Systems, Sun Microsystem and Unisys.

Publicity data

CARMA International tracked the daily *volume* of positive and negative news coverage across 18 national US magazines and newspapers, assigned a *valence* rating and coded the *story topics* for each article. For this study, daily data were compiled into quarterly periods for each company; data include the ratings from over 25,000 articles. CARMA assesses article valence on a scale from 0 to 100. Starting with 50 as the neutral point, article valence is calculated by subtracting or adding points reflecting the positive and/or negative characteristics of the article. Each article was re-categorized as positive (rating > 50), negative (rating < 50) or neutral (rating $= 50$). From this, positive and negative publicity volumes were created for each company by summing the number of articles in each category. As the focus of this study was on the potential effects of positive and negative publicity, neutral articles were not included in the analysis.

Each article was content analyzed and classified into one or more of 27 topic categories by CARMA. These were consolidated into the four general categories reflecting *Business Outcomes*, *Ethical and Legal*, *Leadership and Business Future* and *Marketing Practices*. The articles in each category were summed to create a measure of positive and negative volume for each topic; this measure was calculated for each firm in each quarter.

Advertising spending data

Quarterly media spending data directed at consumers (B2C) and businesses (B2B) were purchased from the CMR division of TNS Media Intelligence (Ad$pender, 2004). The quarterly spending data were matched with the concurrent publicity data.

Sales data

Quarterly sales revenue for each firm was abstracted from the COMPUSTAT database and adjusted for company size. The quarterly sales data were matched with the concurrent publicity and advertising data.

Corporate reputation data

Fortune's Global "Most Admired" Corporations survey was the source for the corporate reputation measure. Approximately 8,000 executives, directors and industry analysts rate the largest multinational firms across 30 industries on a set of eight attributes using a 10-point scale (10 = highest corporate reputation). An overall score summarizing the individual dimensions is calculated based on the 10-point scale and reported by *Fortune* magazine. The overall *Fortune* scores were used to classify firms into *stronger* and *weaker* existing reputation groups (Fombrun and Shanley, 1990). The Fortune data are collected annually each fall, and published in the first or second issue of the next year. Prior year ratings were used to classify firms into reputation groups for each year of the study (e.g. 1999 ratings for 2000, 2000 ratings for 2001, etc.).

Analysis method

This study is exploratory in nature. We chose the multidimensional descriptive discriminant analysis (DDA) to examine group differences in sales and gain a better understanding of the relationships outlined in *H1* and *H2*. Wartick (1992) used correlation analysis to examine differences in media exposure and changes in corporate reputation across groups of firms with differing levels of reputation (good, average and poor), we include more communication inputs than Wartick requiring a multivariate analysis approach. Multiple regression was also used to examine the robustness of the effects.

DDA is a technique suited to investigate and explicate the differences between two or more groups (Finch, 2010; Huberty and Hussain, 2003) and is appropriate when conducting exploratory research. It has been used in numerous research studies in business and marketing for describing choice motivations for purchasing online (Andrews *et al.*, 2007), examining competitive marketing strategies between old and new European Union member states (Golob and Podnar, 2005) and cross-cultural comparisons advertisements (Javalgi *et al.*, 1995).

The volume data including publicity, advertisement spending and sales were adjusted to account for company size and non-normality. Larger companies or those with stronger reputations may have more sales, spend more on advertising or garner

more publicity. Researchers have made size adjustments using a variety of measures including sales, assets and employees. Because human capital is critical for technology firms such as those in our sample, number of employees was used to adjust for company size, a commonly used proxy (Skaggs and Huffman, 2003). It is also used here rather than sales to normalize firm size because sales volume is our dependent variable. First, the volume-based measures in the study (sales, advertising spending and publicity) were divided by the number of employees in each company. Second, due to skewness associated with the variables, sales and all publicity and advertising spending variables were adjusted using a log transformation (Hair *et al.*, 2006). A graphical examination of the distributions revealed that this transformation yielded more normally distributed variables.

Several preliminary analyses examined the potential effect of time (graphical, correlation, and MANCOVA) on the data. A weak negative time relationship with the *Fortune* CR measure was uncovered. An examination with and without a time factor indicated no substantive differences in the results.

In the process of investigating advertising sales relationships in single-source data for what he labeled "fast-moving consumer goods", Jones (1995, 2007) created dichotomized variables yielding some valuable insights. Similarly, in the present study, the companies were divided into two sets of groups:

(1) *weaker* and *stronger* CR; and

(2) *lower* and *higher* sales using a median split (Stammerjohan *et al.*, 2005; Fombrun and Shanley, 1990;).

For CR, companies were grouped using a median split by year to account for a general decrease in the Fortune scores over the four-year time period of the study. Sales groups were designated using a median split by quarter. The median split was selected to retain data, balance group composition for the DDA and provide additional insights into the hypothesized relationships.

Analysis and results

For the initial set of hypotheses, DDA was used to examine the differences in advertising spending and publicity volume/valence comparing firms with lower versus higher sales. This was done for firms with stronger and weaker corporate reputations. Both of the initial discriminant models were significant (weaker firms: canonical = 0.740, chi-square = 49.932, 4 df, $p < 0.001$; stronger firms: canonical = 0.658, chi square = 52.8, 4 df, $p < 0.001$). Both models reveal statistically significant differences in their ability to differentiate between firms with higher and lower sales (Tables I and II).

H1.1 predicted that publicity (positive and negative) would be more important than advertising. We find that positive publicity has the highest factor loading (0.94) in models for both stronger and weaker reputation firms, indicating its importance compared to negative publicity and advertising when distinguishing between higher and lower sales firms. For the stronger reputation firms (Table II), both positive publicity (0.94) and negative publicity (0.49) have higher factor loadings than B2B advertising, which is non-significant (0.18), and B2C, which is barely significant (0.28). In this set of stronger reputation firms, both positive and negative publicity are more important than both forms of advertising, providing support for *H1.1*. For weaker reputation firms (Table I), positive publicity still had the largest factor loading, and B2C

Firms		Sales revenue*	Positive publicity volume*	Negative publicity volume*	B2C advertising spending*	B2B advertising spending*
	Discriminant loading		0.94	0.42	0.62	0.25
Sales revenue			$p < 0.01$	$p < 0.01$	$p < 0.01$	$p < 0.03$
Low sales firms	Mean	\$1,139	3.7	3.5	\$4,947	\$1,057
	n	42	42	42	42	42
High sales firms	Mean	\$10,905	14.7	8.3	\$12,754	\$1,875
	n	42	42	42	42	42

Notes: Sales revenue significantly different, $t = -10.481$; $p < 0.01$; Canonical correlation = 0.740, Wilkes Lambda = 0.535; chi-square = 49.93; 4 df; $*p < 0.001$; 90% original cases correctly classified; 87% cross-validated cases correctly classified; publicity volume, advertising spending and sales revenue adjusted for company size

Table I.
Publicity and advertising spending differences for weaker corporate reputation firms

Firms		Sales revenue*	Positive publicity volume*	Negative publicity volume*	B2C advertising spending*	B2B advertising spending*
	Discriminant loading		0.94	0.49	0.28	*0.18*
Sales revenue			$p < 0.01$	$p < 0.05$	$p < 0.05$	$p = 0.12$
Low sales firms	Mean	\$1,888	7.5	8.8	\$6,136	\$1,615
	n	43	43	43	43	43
High sales firms	Mean	\$7,361	25.3	16.4	\$8,864	\$2,072
	n	54	54	54	54	54

Notes: Sales revenue significantly different, $t = -7.576$; $p < 0.01$; Canonical correlation = 0.658; Wilkes Lambda = 0.567; chi-square = 52.8; 4 df; $*p < 0.001$; 86% original cases correctly classified; 79% cross-validated cases correctly classified; publicity volume, advertising spending and sales revenue adjusted for company size

Table II.
Publicity and advertising spending for stronger corporate reputations firms

advertising spending (0.62) was higher than negative publicity (0.42). Because B2C advertising exceeds negative publicity for this set of firms, *H1.1* is partially supported for this set of weaker reputation firms.

H1.2 predicts that in terms of volume of exposure, all of the advertising and publicity elements matter. For the weaker reputation firms (Table I), *H1.2* is supported; higher sales firms have more positive and negative publicity, as well as more B2B and B2C advertising. For stronger reputation firms (Table II), with the exception of B2B advertising, the volume of all communications signals matter (*H1.2*).

H1.3 predicts that the proportion of positive to negative publicity would be greater for higher sales firms and be more balanced or tilted toward negative publicity for lower sales firms. The data in the first two columns of Tables III and IV show that this relationship was supported for both weaker and stronger reputation firms. The horizontal arrows indicate that the volume of positive publicity exceeds negative publicity for firms with higher sales. For lower sales firms, the difference between

positive and negative publicity is not significant, while higher sales firms had significantly more positive than negative press coverage.

We evaluate *H1.4* and *H1.5* by again examining the discriminant loadings in Tables I and II. As expected, for the weaker reputation firms, all four marketing communication signals have significant loading values (Table I). However, for stronger reputation firms, B2B advertising is not significant (0.18) and B2C advertising is less discriminating (0.28) compared to positive and negative publicity (Table II); for weaker reputation firms, B2C advertising had much greater discriminating importance (0.62). The results support the expectation (*H1.4*) that both publicity and advertising are important factors for distinguishing between weaker reputation firms with higher versus lower sales and the expectation that for stronger reputation firms, advertising is as important of a discriminating factor (*H1.5*).

For the second analysis, multiple regression was used to check the robustness of the DDA. Initially, interaction terms were created by multiplying corporate reputation by each of the independent variables (positive publicity volume, negative publicity volume, B2C advertising spending and B2B advertising spending). Given the high level of multi-collinearity between the interaction and main effects terms, this model only entered the interaction terms. The overall regression model was significant ($F = 59.50$, $p < 0.01$, df = 5,175), with an overall $R^2 = 0.62$. Regression coefficients for the interaction variables were significant (Table V, column 1). Positive publicity volume and B2C advertising had the strongest effects, followed by negative publicity volume and B2B advertising. The coefficients for the latter two variables were negative, indicating that firms with lower sales had higher levels of negative publicity and spent less on B2B advertising.

Table III.
Overall positive and negative publicity volume, reputation, and sales revenue mean comparisons

Fortune reputation	Sales revenue	Overall publicity volume: Positive		Negative
Weaker	Lower	3.7		3.5
		↕		↕
	Higher	14.7	↔	8.3
Stronger	Lower	7.5		8.8
		↕		↕
	Higher	25.3	↔	16.4

Note: ↔ difference significant < 0.05

Table IV.
Positive and negative publicity issue volume by sales revenue mean comparisons

Sales revenue	Business outcome volume: Positive		Negative	Ethical–legal volume: Positive		Negative	Leadership–future volume: Positive		Negative	Marketing practices volume: Positive		Negative
Lower	1.70	↔	3.0	0.4	↔	1.1	1.3	↔	0.5	1.0	↔	0.2
	↕		↕	↕		↕	↕			↕		↕
Higher	5.7		5.3	1.3	↔	2.7	4.6	↔	0.9	4.6	↔	1.4

Note: ↔ difference significant < 0.05

Firms	Corporate reputation interaction model	Weaker corporate reputation	Stronger corporate reputation
R^2	0.62	0.64	0.66
	Beta	Beta	Beta
Positive publicity volume	0.72*	0.49*	0.90*
Negative publicity volume	−0.20*	0.04	−0.25*
B2B advertising spending	−0.13*	−0.05	−0.02
B2C advertising spending	0.31*	0.32*	0.12
	Time beta = −114, $p < 0.02$	Time beta = −181, $p < 0.02$	Time beta = −060, $p = 0.315$

Note: *significance at $p < 0.02$

Table V.
Publicity and advertising effects: regression results

Additional regression models were run for each level of reputation (weaker vs stronger). For weaker reputation firms, the regression model was significant ($F = 28.59, p < 0.001$, df = 5,78), with an overall $R^2 = 0.62$. Only the coefficients for positive publicity volume and B2C advertising were positive and significant (Table V, Column 2). For stronger reputation firms, the regression model was also significant ($F = 34.03$, $p < 0.001$, df = 5,91), with an $R^2 = 0.63$. Only positive and negative publicity volume were significant, with signs in the expected directions (Table V, column 3).

The second set of hypotheses shift focus to a more refined exploration of the relationship between specific news topics and sales. *H2.1* predicts that the positive and negative volume of individual news topics would correspond with sales success. This follows from *H1.1*, which predicted that aggregate positive and negative publicity volume (together with advertising) would correspond to lower and higher company sales. We did not have specific hypotheses about the relative importance of the individual publicity topics. The discriminant model is significant and strong (canonical = 0.701, chi-square = 119.5, 8 df, $p < 0.001$). This result supports *H2.1*, showing that the volume of publicity on specific topics is closely related to sales success. Although we did not have a hypothesis about the relative importance of the story topics or valence, the three most significant differentiating factors were positive stories about *Business Outcomes* (0.75), *Leadership and Business Future* (0.66) and *Marketing Practices* (0.49). Lower in their discriminant loadings are mostly negative publicity about *Business Outcomes* (0.37), *Marketing Practices* (0.35) and *Ethical and Legal* (0.19). Negative *Leadership and Business Future* volume is not significant (Table VI).

H2.2 predicts a topic-based volume effect similar to that predicted and found in *H1.2*. The results in Table IV confirm such a volume effect of positive and negative stories. More coverage is related to higher sales, providing strong support for a general positive and negative topic volume effect. The only exception is in the *Leadership and Business Future* topic where the volume of negative stories is higher but not significantly different. This result suggests that the overall effect of volume in *H1.2* is quite consistent even when examined at the more specific story topic level.

Table VI.
Publicity issue differences between lower and higher sales revenue firms

Firms		Sales revenue	Positive business outcomes	Negative business outcomes	Positive ethical legal	Negative ethical legal	Positive leadership future	Negative leadership future	Positive marketing practices	Negative marketing practices
	Discriminant loading		0.75	0.37	0.26	0.19	0.66	0.15	0.49	0.35
Sales revenue			$p < 0.001$	$p < 0.001$	$p < 0.01$	$p < 0.05$	$p < 0.001$	$p = 0.056$	$p < 0.001$	$p < 0.001$
Low sales	Mean	\$1518	1.7	3.0	0.4	1.1	1.3	0.5	1.0	0.2
firms	*n*	85	85	85	85	85	85	85	85	85
High sales	Mean	\$8880	5.7	5.3	1.3	2.7	4.6	0.9	4.6	1.4
firms	*n*	96	96	96	96	96	96	96	96	96

Notes: Sales significantly different, $t = -15.076$; $p < 0.001$; Canonical correlation: 0.701; Wilkes Lambda = 0.509; chi-square = 119.50; 8 df; $p < 0.001$; 83% original cases correctly classified; 83% cross-validated cases correctly classified; publicity volume and advertising spending adjusted for company size, annual amounts reported

Finally, *H2.3* predicts a difference in the ratio of positive and negative stories about a company in each of the issues categories for firms with higher vs lower sales; this is consistent with our overall expectation in *H1.3*. Firms with higher sales should have more positive than negative stories, while firms with lower sales garner a higher proportion of negative news coverage across story topics. We test this hypothesis in Table IV by examining the positive and negative volume within each story topic. Firms, regardless of sales level, had more positive than negative volume on *Leadership and Business Future* and *Marketing Practices*. In both of these categories of story topics, significantly higher volumes of positive stories were found for firms with higher rather than lower sales. This part of the result supports *H2.3*; however, we do not find such support for *Business Outcomes* and *Ethical and Legal* issues. For *Business Outcomes*, firms with higher sales had effectively equal positive and negative volume; firms with lower sales had an expectedly and significantly higher negative than positive volume. For *Ethical and Legal* issues, all firms, regardless of sales levels, had more negative than positive volume. This result does not support *H2.3* that expected a larger volume of positive to negative stories for firms with higher sales.

Similar to the analysis for *H1*, regression was used to check the robustness of the DDA for the publicity issues. The model was significant ($F = 28.44$ $p < 0.001$, df = 9,171). All four news topics for positive publicity had significant coefficients (Table VII), while none of the negative publicity news topics were significant. These findings are similar to the DDA where positive coverage of *Business Outcomes*, *Leadership & Future* and *Marketing Practices* were the dominant factors in the model. Positive *Ethical Legal* issues were less dominant and, interestingly, had a negative effect on sales in the regression model.

Discussion

The underlying premise of the study is that advertising and publicity signals matter for sales. The results support the prevailing belief that publicity is related to the firm's bottom line. This complements results in the WOM literature that finds that WOM publicity might be more influential than traditional marketing efforts (Trusov *et al.*, 2009). In the current study, positive media publicity is the dominant factor discriminating between firms with higher versus lower sales performance, and for this set of firms, media publicity is a more important factor than advertising. This finding is

R^2	0.58
Issues	Beta
Positive business outcomes	0.35*
Negative business outcomes	0.05
Positive ethical legal	−0.25*
Negative ethical legal	−0.09
Positive leadership future	0.47*
Negative leadership future	0.02
Positive marketing practices	0.36*
Negative marketing practices	−0.16
	Time Beta = −114, $p < 0.01$

Note: *significance at $p < 0.001$

Table VII. Publicity issues regression: results

consistent with Eisend and Kuster's (2011) meta-analysis that reveals a stronger effect for media publicity than advertising. Of course, the findings here are based solely on advertising spending and do not include instances of extremely creative campaigns where the company spends less money and uses different media placement and scheduling to increase the effect of the advertisement. It is also important to note that advertising volume on its own does play an important role, and may actually help to accentuate the value of publicity through enhanced brand salience (Ehrenberg *et al.*, 2002) and other company strategies through "flow" effects that are not apparent in volume of spending alone (see Hanssens, 2009 for an overview).

The important overall discriminating role of positive over negative publicity in classifying firms into high and low sales groups runs counter to some research where negative information has more diagnostic value and is used more by audiences (Kanouse and Hanson, 1971). However, much of the support for this "negativity bias" in marketing arises from extreme information such as when there is a dramatic and vivid safety problem (Weinberger, 1986), rather than from routine negative stories that appear daily. In cases with less extreme information, negative information does not necessarily dominate positive in terms of audience attitudes (Fiske, 1980; East *et al.*, 2008). Across companies, the average rating for positive stories was 59 (100 point scale, neutral = 50) and negative stories was 40. Both sets of ratings are less extreme, similar to the more moderate impression formation studies carried out by Fiske (1980). The absence of a negativity bias is therefore not surprising.

Our findings demonstrate that firms with higher sales garner more negative and positive publicity than those with lower sales. It is the balance of positive over negative publicity that distinguishes between higher and lower sale firms. For all firms, negative media coverage may just be part of doing business; the key is keeping the balance of coverage positive. This is consistent with Eisend and Kuster's (2011) conclusion that mature firms with net positive publicity are perceived better than those where the balance of publicity is more neutral or negative. Here, firms with higher sales tend to have more positive than negative coverage.

The study also focused on understanding how the topic of news coverage was related to sales. Our investigation sought to learn if the overall publicity effects predicted in the first set of hypotheses would hold at the level of story topics. For positive stories, the four story categories had average ratings from 58 to 59 on the 100-point CARMA scale; for negative stories, the average ratings were 40 to 41. As in the overall analysis, these ratings for positive and negative volume reflect less extreme publicity valence. Generally, positive coverage of *Business Outcomes*, *Leadership and Business Future* and *Marketing Practices* are most important in discriminating between higher and lower sales firms. This finding is consistent with the analysis from *H1* where positive publicity had a stronger effect than negative publicity.

Although we had no specific predictions about the relative importance of the four topics, based on their low discriminant loadings, we find that positive and negative media coverage of *Ethical and Legal* issues are the least important factors when distinguishing between high and low sales firms. For these *Ethical and Legal* issues, negative publicity has greater weight than positive. We cannot say if this is a general characteristic for articles within this category or a sample anomaly. What we can say is that when parsed out by topic, stronger firms continue to garner more positive than negative stories, but the effect of these varies subtly based on the story topic. Broadly,

the results for both sets of hypotheses support the overall finding that the volume of positive publicity was more important than negative publicity.

Weaker reputation firms

In the first two discriminate models, we explored communication differences between weaker and stronger reputation firms. Firms that had weaker corporate reputations but higher sales garnered over four times as much positive publicity as firms with weak reputations and lower sales. Although Wartick (1992) did not find that the volume of media coverage mattered for firms with weaker reputations, this may have occurred because positive and negative news stories were combined in that dataset. This may have masked the effect of positive publicity across a range of topic areas. Moreover, in the present investigation, these higher sales firms advertised more heavily, spending two and a half times more on B2C advertising and almost twice as much on B2B advertising. The results of the regression model for weaker reputation firms indicate that firms with higher sales tended to have higher levels of publicity volume and B2C advertising spending. These two factors overshadowed negative publicity volume and B2B advertising spending, similar to the DDA findings.

Conversely, weaker reputation firms with lower sales attracted less positive publicity and had a higher proportion of negative media coverage, a finding confirmed with both the DDA and regression analyses. They also spent less on advertising. The results provide support for a volume effect of both positive publicity and B2C advertising that distinguish firms with lower and higher sales. In the case of these weaker reputation firms, advertising is still essential as part of the marketing communications toolkit. While Fombrun and Shanley (1990) found a positive correlation between advertising and corporate reputation, here we see that this might carry over to sales as well.

Stronger reputation firms

The data tell a slightly different story for stronger reputation firms. B2C advertising was less strongly related to sales as it was for the weaker reputation firms. It may be firms with already stronger reputations see diminishing returns on advertising spending. Although there may be a ceiling effect for advertising, these stronger reputation firms were not guaranteed higher sales. This is consistent with research showing that firms with high market share predictably underspend on advertising (Jones, 1990; Hansen and Christensen, 2005). Conclusions about the diminished importance of advertising should be tempered though. In some instances, particularly in B2C contexts, advertising may itself trigger some publicity (Harris, 1991) and WOM volume. Keller and Fay (2009) suggest that up to 22 per cent of on- or offline WOM may be directly related to conversations about advertising. Not only can advertising help trigger WOM, but they suggest that the impact of WOM does not come at the expense of advertising's unique role. Harris (1991), among others, speculates that publicity and advertising are synergistic, creating excitement and inducing sales. In special cases such as the Super Bowl in the USA or when a firm's advertising is provocative and worthy of press coverage, advertising influences the volume of traditional and social media stories. It is likely that some forms of advertising magnify the volume and impact of traditional publicity.

In terms of publicity, firms with a stronger reputation and higher sales garnered more positive than negative news, while firms with stronger reputations and lower sales

had slightly, net negative media coverage. In short, stakeholders may not discount all negative information if not offset by abundant positive publicity. These findings of a dominance of positive and negative publicity was confirmed by the regression analysis, which further revealed that negative publicity had an adverse effect on sales.

Limitations

This study is unique, in that it combines a rich set of industry data to understand the relationship between sales, reputation and different forms of marketing communications (advertising and publicity) in a DG&S context; however, the dataset was limiting, in some ways, providing opportunities for future research in this area. Unlike CPG's where there is an archive of single source data about advertising and related customer behavior, this study relied on multiple sources of data, as no single source was available for DG&S. Further, the CARMA publicity archive ran only between 2000 and 2003 and focused on a select group of companies, limiting the number of time periods and data points available for analysis. Though use of this older data is not ideal, it is not unprecedented for advertising research to use older archives in the absence of current data (Winer, 1979). Many empirical generalizations about advertising that marketers and academics rely on today were developed from experiments and single source data extending back into the 1970s, 1980s and 1990s. While it is true that the media landscape has changed since the collection of this data, we still obtain important insights related to advertising and publicity effects even in a more digital social media environment. This provides an opportunity for future research to explore these relationships in an expanded publicity environment.

Given the exploratory nature of this study, analyses were selected to help illuminate managerial insights. Although very useful in exploratory research for describing relationships, the descriptive discriminant analysis applied here required the classification of companies into two sets of groups for corporate reputation and sales, possibly attenuating the statistical significance of the results. Our analysis is descriptive and we do not imply any causality between publicity, advertising and sales, as these variables are static. The regression analysis was used to check the robustness of the DDA results. Though more publicity and advertising spending factors were significant in the DDA than in the regression models, all the significant factors in the regression models correspond to the significant effects found in the DDA.

The *Fortune* corporate reputation measure, while receiving some criticism, has been used in numerous academic studies (Fryxell and Wang, 1994; Fombrun and Shanley, 1990). With no singular accepted and publicly accessible measure of corporate reputation, however, the *Fortune* measure remains a reasonable indicator of company standing. Because it is a measure of executive perceptions of reputation, the Fortune measure is a good match for our DG&S firms.

In this study, advertising is treated purely as a volume signal based on spending. Other indicators, such as Gross Rating Point (GRP's), are an alternative and perhaps better proxy for volume (Sethuraman *et al.*, 2011). Armstrong and Patnaik (2009) and MacInnis *et al.* (2002), among others, suggest that researchers consider the quality of advertising when looking at effects for insight into the incremental impact of a dollar spent. We concur: analysis of quality and type of appeal would be useful, but there are no cross-media sources of such data across all of the firms, media, and time periods.

Finally, the sample consists of 14 durable goods and services technology firms, which may restrict the generalizability of the results. We used firms where the company and brand names are the same. Although there are numerous firms where there is a strong connection between the company and product names, our results do not address the equally important formation of consumer brand attitudes for companies like Proctor & Gamble that have a house of individual brands like Tide and Crest.

While the study has limitations, it is unique; it uses proprietary research and data from a range of sources to help researchers and firms begin to understand the relationship between different forms of marketing communications, corporate reputation and sales for a set of understudied firms for which there is no single-source data. Future studies can build on this analysis to account for these limitations. Additional data on WOM volume and tone, product quality and sales force size, as well as outcomes, such as consumer satisfaction, market share, profitability and company value, will be useful as the field develops a deeper understanding of the relationship between marketing communications activities and firm-level performance metrics.

Conclusion

While many in industry and academia have asserted that public relations activities are increasingly important for firms (Ries and Ries, 2002), most empirical studies, to date, have focused on its role in changing stakeholder attitudes, consumer perceptions of the brand, and firm reputation rather than financial metrics such as sales. Yet many in the C-Suite have asked advertising and PR to connect their efforts to the firms' bottom lines. This analysis provides one of the few examinations of the relationship between different forms of marketing communications and sales by taking into account a company's existing reputation, publicity volume/valence, story topic of media coverage and B2B and B2C advertising expenditures.

This study focused on a set of durable goods and services companies to understand the relationship between different forms of marketing communication and corporate reputation to determine what matters most when looking at sales results. Broadly, we found the strongest relationship between garnering a high volume of net positive publicity and sales. While advertising made an important difference, its influence was slightly more contingent. Firms with weaker reputations and higher sales advertise more and have a higher volume of positive publicity across a range of topics. That is potentially good news for managers of firms who may wish to invest in PR activities and advertising to better manage the balance between positive and negative publicity and overcome a weak reputation. Managers of firms with stronger existing corporate reputations cannot expect more B2B or B2C advertising spending alone to elevate sales. For these stronger reputation firms, continuing to garner positive publicity and avoiding a disproportionate balance of negative publicity is particularly important.

The following summarizes the results for this set of firms:

- It is possible to clearly differentiate between firms with higher and lower sales using publicity volume and advertising spending.
- Positive publicity is more important than negative publicity volume and advertising spending (B2C and B2B) in differentiating between higher and lower sales groups.

- Overall, the volume of positive and negative publicity and advertising spending (B2C and B2B) were higher in firms that achieved stronger sales. The larger number of negative stories was offset by an even greater number of positive stories, suggesting that the balance between the two is important.
- For weaker reputation firms, B2C advertising spending was second in importance to positive publicity when distinguishing between lower and higher sales groups. For stronger reputation firms, advertising had a less important role in distinguishing between sales levels.
- The topic of news coverage is related to sales. Generally, positive coverage of *Business Outcomes*, *Leadership and Business Future* and *Marketing Practices* were most important in discriminating between firms with stronger from weaker sales.

References

Aaker, D.A. and Jacobson, R. (2001), "The value relevance of brand attitude in high-technology markets", *Journal of Marketing Research*, Vol. 38 No. 4, pp. 485-493.

Ad$pender (2004), *Competitive Media Reporting and Publisher's Information Bureau*, TNS Media Intelligence/CMR, New York, NY.

Ahluwalia, R., Burnkrant, R.E. and Unnava, H.R. (2000), "Consumer response to negative publicity: the moderating role of commitment", *Journal of Marketing Research*, Vol. 37 No. 2, pp. 203-214.

Anderson, N.H. (1971), "Integration theory and attitude change", *Psychological Review*, Vol. 78 No. 3, pp. 171-206.

Andrews, L., Kiel, G., Drennan, J., Boyle, M.V. and Weerawardena, J. (2007), "Gendered perceptions of experiential value in using web-based retail channels", *European Journal of Marketing*, Vol. 41 Nos 5/6, pp. 640-658.

Armstrong, J.S. and Patnaik, S. (2009), "Using quasi-experimental data to develop empirical generalizations for persuasive advertising", *Journal of Advertising Research*, Vol. 49 No. 2, pp. 170-175.

Basdeo, D.K., Smith, K.G., Grimm, C.M. and Rindova, V.P. (2006), "The impact of market actions on firm reputation", *Strategic Management Journal*, Vol. 27 No. 12, pp. 1205-1219.

Berger, J., Sorensen, A.T. and Rasmussen, S.J. (2010), "Positive effects of negative publicity: when negative reviews increase sales", *Marketing Science*, Vol. 29 No. 5, pp. 815-817.

Blair, M.H. and Rosenberg, K.E. (1994), "Convergent findings increase our understanding of how advertising works", *Journal of Advertising Research*, Vol. 34 No. 2, pp. 35-44.

Boulding, W. and Kirmani, A. (1993), "A consumer-side experimental examination of signaling theory: do consumers perceive warranties as signals of quality?", *Journal of Consumer Research*, Vol. 20 No. 2, pp. 111-123.

Brown, N. and Deegan, C. (1998), "The public disclosure of environmental performance information: a dual test of media agenda setting theory and legitimacy theory", *Accounting and Business Research*, Vol. 29 No. 1, pp. 21-41.

Carroll, C.E. (2004), "How the mass media influence perceptions of corporate reputation: exploring agenda-setting effects within business news coverage", Unpublished doctoral dissertation, University of Texas, Austin, TX.

Charlett, D., Garland, R. and Marr, N. (1995), "How damaging is negative word of mouth?", *Marketing Bulletin*, Vol. 6 No. 1, pp. 42-50.

Dawar, N.J. and Pillutla, M.M. (2000), "Impact of product-harm crises on brand equity: the moderating role of consumer expectations", *Journal of Marketing Research*, Vol. 37 No. 2, pp. 215-226.

Deephouse, D.L. and Carter, S.M. (2005), "An examination of differences between organizational legitimacy and organizational reputation", *Journal of Management Studies*, Vol. 42 No. 2, pp. 329-360.

East, R., Hammond, K. and Lomax, W. (2008), "Measuring the impact of positive and negative word of mouth on brand purchase probability", *International Journal of Research in Marketing*, Vol. 25 No. 3, pp. 215-224.

Eastlack, J.O. and Rao, A.G. (1986), "Modeling response to advertising and pricing changes for"V-8" cocktail vegetable juice", *Marketing Science*, Vol. 5 No. 3, pp. 245-259.

Eberl, M. and Schwaiger, M. (2005), "Corporate reputation: disentangling the effects on financial performance", *European Journal of Marketing*, Vol. 39 Nos 7/8, pp. 838-854.

Ehrenberg, A., Barnard, N., Kennedy, R. and Bloom, H. (2002), "Brand advertising as creative publicity", *Journal of Advertising Research*, Vol. 42 No. 4, pp. 7-18.

Eisend, M. and Kuster, F. (2011), "The effectiveness of publicity versus advertising: a meta-analytic investigation of its moderators", *Journal of the Academy of Marketing*, Vol. 39 No. 6, pp. 906-921.

Entman, R.M. (1989), "How the media affect what people think: an information processing approach", *The Journal of Politics*, Vol. 5 No. 2, pp. 347-370.

Erdem, T. and Swait, J. (1998), "Brand equity as a signaling phenomenon", *Journal of Consumer Psychology*, Vol. 7 No. 2, pp. 131-157.

Erdem, T., Swait, J. and Valenzuela, A. (2006), "Brands as signals: a cross-country validation study", *Journal of Marketing*, Vol. 70 No. 1, pp. 34-49.

Finch, H. (2010), "Identification of variables associated with group separation in descriptive discriminant analysis: comparison of methods for interpreting structure coefficients", *The Journal of Experimental Education*, Vol. 78 No. 1, pp. 26-52.

Fiske, S.T. (1980), "Attention and weight in person perception: the impact of negative and extreme behavior", *Journal of Personality and Social Psychology*, Vol. 38 No. 6, pp. 889-906.

Fiske, S. and Taylor, S. (1991), *Social Cognition*, McGraw-Hill, New York, NY.

Fombrun, C.J. and Rindova, V. (1998), "Reputation management in global 1000 firms: a benchmarking study", *Corporate Reputation Review*, Vol. 1 No. 3, pp. 205-215.

Fombrun, C.J. and Shanley, M. (1990), "What's in a name? Reputation building and corporate strategy", *Academy of Management Journal*, Vol. 33 No. 2, pp. 233-258.

Fryxell, G.E. and Wang, J. (1994), "The Fortune corporate 'reputation index': reputation for what?", *Journal of Management*, Vol. 20 No. 1, pp. 1-14.

Golan, G. and Wanta, W. (2001), "Second-level agenda setting in the New Hampshire primary: a comparison of coverage in three newspapers and public perceptions of candidates", *Journalism and Mass Communication Quarterly*, Vol. 78 No. 2, pp. 247-259.

Golob, U. and Podnar, K. (2005), "Competitive advantage in the marketing of products within the European Union", *European Journal of Marketing*, Vol. 41 Nos 3/4, pp. 246-256.

Gray, E.R. and Balmer, J.M.T. (1998), "Managing corporate image and corporate reputation", *Long Range Planning*, Vol. 31 No. 5, pp. 695-702.

Hair, J., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2006), *Multivariate Data Analysis*, Pearson Education, Upper Saddle River, NJ.

Hansen, F. and Christensen, L.B. (2005), "Share of voice/share of market and long-term advertising effects", *International Journal of Advertising*, Vol. 24 No. 3, pp. 297-320.

Hanssens, D.M. (2009), *Empirical Generalizations About Marketing Impact*, Marketing Science Institute, Boston, MA.

Harris, F. and DeChernotony, L. (2001), "Corporate branding and corporate performance", *European Journal of Marketing*, Vol. 35 Nos 3/4, pp. 441-456.

Harris, T.L. (1991), *The Marketer's Guide to Public Relations: How Today's Top Marketers are Using the New PR to Gain a Competitive Edge*, John Wiley & Sons, New York, NY.

Harris, T.L. and Whalen, P.T. (2006), *The Marketer's Guide to Public Relations in the 21st Century*, South-Western Educational Publisher, Mason, OH.

Hawkins, S.A. and Hoch, S.J. (1992), "Low-involvement learning: memory without evaluation", *Journal of Consumer Research*, Vol. 19 No. 2, pp. 212-225.

Heath, C. and Tversky, A. (1991), "Preferences and beliefs: ambiguity and competence in choice under uncertainty", *Journal of Risk and Uncertainty*, Vol. 4 No. 1, pp. 5-28.

Heil, O. and Robertson, T.S. (1991), "Toward a theory of competitive market signaling: a research agenda", *Strategic Management Journal*, Vol. 12 No. 6, pp. 403-418.

Herbig, P., Milewicz, J. and Golden, J. (1994), "A model of reputation building and destruction", *Journal of Business Research*, Vol. 31 No. 1, pp. 23-31.

Huberty, C.J. and Hussain, M.H. (2003), "Some problems in reporting use of discriminant analysis", *Journal of Experimental Education*, Vol. 71 No. 2, pp. 177-191.

Javalgi, R.G., Cutler, B.C. and Malhotra, N.K. (1995), "Print advertising at the component level: across-cultural comparison of the United States and Japan", *International Journal of Business Research*, Vol. 34 No. 2, pp. 117-124.

Jones, J.P. (1990), "Ad spending: maintaining market share", *Harvard Business Review*, Vol. 68 No. 1, pp. 38-43.

Jones, J.P. (1995), "Single source research begins to fulfill its promise", *Journal of Advertising Research*, Vol. 35 No. 2, pp. 9-16.

Jones, J.P. (2007), *When Ads Work: New Proof that Advertising Triggers Sales*, Lexington Books, New York, NY.

Kanouse, D.E. and Hanson, L.R. (1971), "Negativity in evaluations", in Jones, E.E., Kanouse, D.E., Kelley, H.H., Nisbett, R.F., Valins, S. and Weiner, B.(Eds), *Attribution: Perceiving the Causes of Behavior*, General Learning Press, Morristown, NJ, pp. 47-62.

Keller, E. and Fay, B. (2009), "The role of advertising in word of mouth", *Journal of Advertising Research*, Vol. 49 No. 2, pp. 154-158.

Kitchen, P.J. (1996), "Public relations in the promotional mix: a three-phase analysis", *Marketing Intelligence and Planning*, Vol. 1 No. 2, pp. 5-12.

Lodish, L.M., Abraham, M., Kalmenson, S., Livelsberger, J., Lubetkin, B., Richardson, B. and Stevens, M.E. (1995), "How T.V. advertising works: a meta-analysis of 389 real world split cable T.V. advertising experiments", *Journal of Marketing Research*, Vol. 32 No. 2, pp. 125-139.

McDonald, C. (1992), *How Advertising Works*, The Advertising Association and NTC, London.

MacInnis, D.J., Rao, A.G. and Weiss, A.M. (2002), "Assessing when increased media weight of real-world advertisements helps sales", *Journal of Marketing Research*, Vol. 39 No. 4, pp. 391-407.

Micu, A.C. and Thorson, E. (2008), "Leveraging news and advertising to introduce new brands on the web", *Journal of Interactive Advertising*, Vol. 9 No. 1, pp. 33-56.

Nguyen, C. and Romaniuk, J. (2013), "Factors moderating the impact of word of mouth for TV and film broadcasts", *Australasian Marketing Journal*, Vol. 21 No. 1, pp. 25-29.

Pollock, T.G. and Rindova, V.P. (2003), "Media legitimation effects in the market for initial public offerings", *Academy of Management Journal*, Vol. 46 No. 5, pp. 631-642.

Ries, A. and Ries, L. (2002), *The Fall of Advertising & The Rise of PR*, Harper Business, New York, NY.

Rust, R.T., Ambler, T., Carpenter, G.S., Kumar, V. and Srivastav, R.K. (2004), "Measuring marketing productivity: current knowledge and future directions", *Journal of Marketing*, Vol. 68 No. 4, pp. 76-89.

Sethuraman, R., Tellis, G. and Briesch, R. (2011), "How well does advertising work? Generalizations from a meta-analysis of brand advertising elasticity", *Journal of Marketing*, Vol. 48 No. 3, pp. 457-471.

Skaggs, B. and Huffman, T. (2003), "A customer interaction approach to strategy and production complexity alignment in service firms", *Academy of Management Journal*, Vol. 46 No. 6, pp. 775-786.

Stammerjohan, C., Wood, C.M., Chang, Y. and Thorson, E. (2005), "An empirical investigation of the interaction between publicity, advertising, and previous brand attitudes and knowledge", *Journal of Advertising*, Vol. 34 No. 4, pp. 55-67.

Trusov, M., Bucklin, R.E. and Pauwels, K. (2009), "Effects of word-of-mouth versus traditional marketing: findings from an internet social networking site", *Journal of Marketing*, Vol. 73 No. 3, pp. 90-102.

Vakratas, D. and Ambler, T. (1999), "How advertising works: what do we really know?", *Journal of Marketing*, Vol. 63 No. 1, pp. 26-43.

Van Riel, C.B.M. and Fombrun, C.J. (2007), *Essentials of Corporate Communication: Implementing Practices for Effective Reputation Management*, Routledge, Abingdon, New York, NY.

Wartick, S.L. (1992), "The relationship between intense media exposure and change in corporate reputation", *Business and Society*, Vol. 31 No. 1, pp. 33-49.

Weinberger, M.G. (1986), "Products as targets of negative information: some recent findings", *European Journal of Marketing*, Vol. 20 Nos 3/4, pp. 110-128.

Wind, Y. and Sharp, B. (2009), "Advertising empirical generalizations: implications for research and action", *Journal of Advertising Research*, Vol. 49 No. 3, pp. 246-252.

Winer, R.S. (1979), "An analysis of the time-varying effects of advertising: the case of Lydia Pinkham", *Journal of Business*, Vol. 52 No. 4, pp. 563-576.

Zajonc, R. (1968), "The attitudinal effects of mere exposure", *Journal of Personality and Social Psychology*, Vol. 9 No. 2, pp. 1-27.

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