

# The Quest for Citations: Drivers of Article Impact

Why do some articles become building blocks for future scholars, whereas others remain unnoticed? The authors aim to answer this question by contrasting, synthesizing, and simultaneously testing three scientometric perspectives—universalism, social constructivism, and presentation—on the influence of article and author characteristics on article citations. They study all articles published in a sample of five major journals in marketing from 1990 to 2002 that are central to the discipline. They count the number of citations each of these articles has received and regress this count on an extensive set of characteristics of the article (i.e., article quality, article domain, title length, the use of attention grabbers, and expositional clarity) and the author (i.e., author visibility and author personal promotion). They find that the number of citations an article in the marketing discipline receives depends more on “what is said” (quality and domain) and “who says it” (author visibility and personal promotion) than on “how it is said” (title length, the use of attention grabbers, and expositional clarity). The insights gleaned from this analysis contribute to the marketing literature and are relevant to scientific stakeholders, such as the management of scientific journals and individual academic scholars, as they strive to maximize citations. They are also relevant to marketing practitioners; they inform practitioners on characteristics of the academic journals in marketing and their relevance to decisions they face. Conversely, the insights also raise challenges regarding how to make journals accessible and relevant to marketing practitioners: (1) Authors visible to academics are not necessarily visible to practitioners; (2) the readability of an article may hurt academic credibility and impact, but it may be instrumental in influencing practitioners; and (3) it remains questionable whether articles that academics assess to be of high quality are also managerially relevant.

“What makes an article influential? Why do some articles have enormous impact on the field, and others practically none? As both students and professionals, all of us read articles that stay with us for the rest of our lives, other articles are forgotten.” (Sternberg and Gordeeva 1996, p. 69)

---

Stefan Stremersch is Professor of Marketing, School of Economics, Erasmus University Rotterdam, the Netherlands, and Visiting Professor of Marketing, Fuqua School of Business, Duke University (e-mail: stremersch@few.eur.nl). Isabel Verniers is a doctoral candidate in Marketing, Department of Marketing, Faculty of Economics and Business Administration, Ghent University, Belgium (e-mail: Isabel.Verniers@UGent.be). Peter C. Verhoef is Professor of Marketing, Department of Marketing, Faculty of Economics, University of Groningen, the Netherlands (e-mail: p.c.verhoef@rug.nl). This article was written when the second author was a visiting scholar at Erasmus University Rotterdam, the Netherlands. The authors acknowledge financial support of the Erasmus Institute for Research in Management (ERIM) and Graduate School and Research Institute of the Faculties of Management & Organisation and Economics at the University of Groningen (SOM) and the data support of Ton Van Raan, Thed Van Leeuwen, Peter Negenborn, and Clara Calero of Centre for Science and Technology Studies, Leiden University, the Netherlands. The authors also thank Lutgart Verraes, Jan Van Waes, and Stijn Van Waes for their research assistance. This article has benefited from the comments of Marnik Dekimpe, Bas Donkers, Bruce Hardie, Jan-Benedict E.M. Steenkamp, Christophe Van den Bulte, Stijn Van Osselaer, and Sriram Venkataraman in earlier stages of its development. Finally, the authors value the comments of the three anonymous *JM* reviewers, who were extremely helpful in strengthening the final manuscript.

---

To read and contribute to reader and author dialogue on *JM*, visit <http://www.marketingpower.com/jmblog>.

---

The saying “publish or perish” rules a great part of assistant professors’ professional lives in the race for tenure. However, the extent to which the field pays attention to what an academic publishes determines the rest of his or her academic career. It is common to examine the citations that published work has received when evaluating promotions to full and chaired professor, when evaluating the collective impact of a department or school, and when evaluating journal standing. “Yet, despite the widely acknowledged importance of citations, many scholars have noted that we know little about the factors that influence whether a given paper, and therefore a given scholar, is cited” (Baldi 1998, p. 829). The science of measuring and analyzing science to address such issues is called “scientometrics.”

Prior studies in marketing have studied diverse scientometric issues. Bettencourt and Houston (2001a) identify which method types and which subject areas receive more attention. Hoffman and Holbrook (1993) introduce a two-stage procedure to investigate the underlying structure of author cocitations. Leong (1989) examines the reference source nature for articles published in *Journal of Consumer Research (JCR)*. Cote, Leong, and Cote (1991) study the influence of *JCR* on other disciplines, and Baumgartner and Pieters do the same for *International Journal of Research in Marketing (IJRM)* (Pieters et al. 1999), marketing journals in general (Baumgartner and Pieters 2003), and economic journals in general (Pieters and Baumgartner 2002). Zinkhan, Roth, and Saxton (1992) document the mutual exchange (both referencing to and from) between *JCR* and other disciplines. Tellis, Chandy, and Ackerman (1999)

study four major journals (*JCR*, *Journal of Marketing* [*JM*], *Journal of Marketing Research* [*JMR*], and *Marketing Science* [*MKS*]) and examine the extent to which they are diverse in their references. Bettencourt and Houston (2001b) revisit this topic for *JCR*, *JM*, and *JMR*. Stremersch and Verhoef (2005) study globalization of authorship in the marketing discipline and find that it has increased diversity in the field but has hurt the impact of several major journals. Goldenberg, Libai, and Muller (2005) characterize coauthor networks in marketing along several focal network measures. Recently, Bauerly, Johnson, and Singh (2005) have pointed to the importance of readability of a marketing article for creating impact. Moreover, (prior) editors of major marketing journals have stressed the importance of presentation and readability (e.g., Mick 2005; Staelin 2002).

The focal question of the current article is, How do scientometric characteristics of articles and authors affect the citations an article receives in the marketing discipline? To the best of our knowledge, this question has not yet been studied. To answer this question, we contrast and synthesize three theoretical perspectives on the drivers of citations and test them simultaneously on a sample of five major marketing journals over a 13-year time span. This enables us to explain why some articles in marketing are heavily cited, whereas others remain unnoticed.

We embed the theory we develop in prior, though fragmented, scientometric work in other disciplines. Bayer (1982) examines drivers of citations in the marriage and family literature and finds that the literature an article connects to and author eminence both affect article impact. Van Dalen and Henkens (2001) show that characteristics of the authors, visibility, content, and journal significantly affect the impact of articles in demography. In a chemical engineering context, Peters and Van Raan (1994) find that author reputation and number of references primarily affect article impact. Baldi (1998) examines which characteristics of two articles in astrophysics influence the probability that a citation exists from the citing to the cited article. In line with Stewart's (1983) prior findings in geology, Baldi finds that articles are influential mostly because of what they say, not because of who the authors are.

Gaining an understanding of the effects of scientometric characteristics of an article and its author(s) on the number of times an article is cited is relevant to the discipline. Individual researchers and journals alike try to maximize the number of times they are cited. For individual researchers, the number of citations is a dominant criterion for promotion, salary increases, and funding. It also determines the extent to which the individual researcher is viewed as a thought leader in a certain field of inquiry. For journals, the number of citations determines to a large extent their prestige. In turn, journal prestige translates into subscriptions (i.e., the likelihood that libraries and individual scholars will subscribe increases with prestige) and an ability to attract high-quality and novel manuscripts (i.e., researchers' preferences to submit their best work to a journal increases with journal prestige). For practitioners, a clear understanding of the different characteristics underlying scholarly work in marketing is relevant because it informs them about the work's relevance to decision areas they face and the

extent to which academic journals in marketing may provide good sources for new marketing knowledge in the future.

We organize the remainder of the article as follows: First, we develop the scientometric theory and present our research hypotheses. Second, we discuss our data. Third, we explain our analysis methodology and present the results. Fourth, we discuss our findings, develop implications for different scientific stakeholders, consider the limitations, and present avenues for further research.

## Theory

We discern three perspectives on the influence of scientometric characteristics of articles and authors on the citations an article receives (for our conceptual framework, see Figure 1). The first is the universalist perspective on science, which states that the reward structure of science is openness and based on a cognitive procedure (Baldi 1998). Therefore, article characteristics, such as its cognitive content, determine article citations (Van Dalen and Henkens 2001). The second is the social constructivist perspective, which claims that extrascientific and functionally irrelevant author characteristics, such as author eminence (Baldi 1998), play a significant role in the allocation of citations. The third is the presentation perspective. Although fragmented, the claim that underlies the presentation perspective is that articles have impact for how they present the theory, the study, and the findings. We develop specific predictions for each perspective.

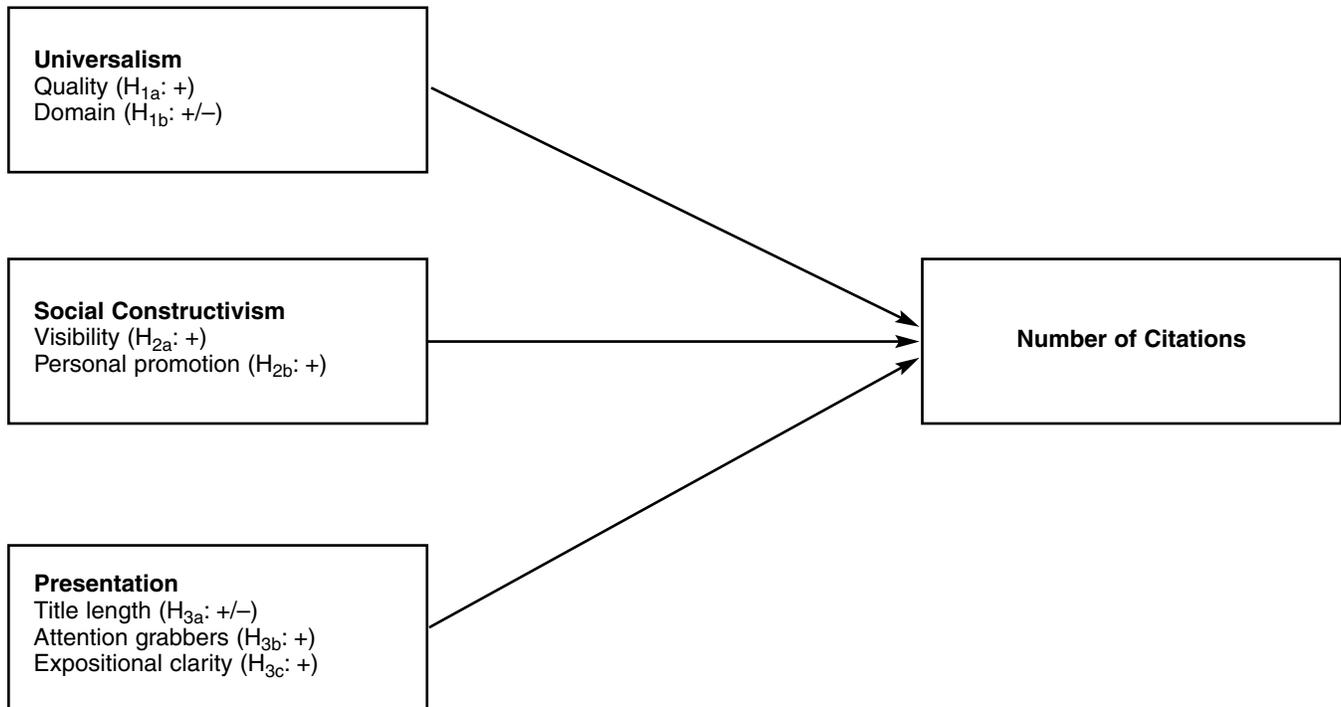
### **The Universalist Perspective**

The universalist perspective is that articles are cited for "what" the authors say. We distinguish two dimensions within this perspective: (1) quality of the article and (2) domain of the article.

The quality of an article may affect the extent to which it is cited. High-quality articles may represent bigger breakthroughs and therefore may be pathbreaking. Thus, they may provide more inspiration for further research. High-quality articles may also present findings of higher reliability than those of low-quality articles, and therefore high-quality articles may be more able to persuade convincingly (Gilbert 1977). Thus, high-quality articles may be cited more than low-quality articles.

The domain of the article may affect citations as well. Domains may differ in orientation (behavioral, quantitative, and managerial), method type (i.e., the method the article uses; e.g., conceptual, empirical, methodological, mathematical), and subject area (i.e., the subject on which the article focuses; e.g., advertising, new products, relationship marketing) and thus may contain articles that are more or less cited for several reasons. First, domains may differ in size. Prior research has shown that smaller domains attract fewer citations than larger domains (King 1987). Second, domains may differ in the extent to which they are relevant to one another. One domain may have relevance to more other domains than another domain and, as such, may attract more citations (Stewart 1983). Third, domains may differ in the extent to which they have reached maturity.

**FIGURE 1**  
**Conceptual Framework**



Domains that are new may represent greater breakthroughs than domains that are mature. Therefore, the articles in new domains may be cited more than articles in mature domains (Sternberg and Gordeeva 1996). Fourth, there may be divergence in citation practices across domains; for example, the citation practice in one domain may be to cite other articles in the same domain frequently, whereas the citation practice in another domain may be to cite articles from other disciplines (Van Dalen and Henkens 2004).

On the basis of this discussion, we derive the following hypothesis:

- H<sub>1</sub>: Universal characteristics of an article affect the times the article is cited, in that (a) quality positively affects the number of citations and (b) domain affects the number of citations.

***The Social Constructivist Perspective***

The social constructivist perspective is that articles have an impact based on “who” the authors of an article are. We discern two dimensions within this perspective: (1) visibility and (2) personal promotion.

Merton (1968) introduces the Matthew effect in science. It is named after the Gospel according to Matthew (25:29), which states that “for unto everyone that hath shall be given and he shall have abundance: but from him that hath not shall be taken away even that which he hath”; in other words, this effect posits “the accruing of greater increments of recognition for particular scientific contributions to scientists of considerable repute and the withholding of such recognition from scientists who have not yet made their

mark” (Merton 1968, p. 58). Merton’s (1968, p. 59) arguments are that “a scientific contribution will have greater visibility when it is introduced by a scientist of high rank, rather than when it is introduced by one who has not yet made his mark.” As such, it might be expected that the work of academics with longer publication records, with positions on the editorial boards of prestigious journals, or with an appointment at highly ranked business schools (Bergh, Perry, and Hanke 2006) will receive more attention for the same contribution than that of academics of lower standing. Visibility of authors may also affect article citations in other ways. In the marketing discipline, Stremersch and Verhoef (2005) show that articles authored by international scholars are cited less than articles by U.S.-based scholars. The theoretical reasoning they develop is that international authors may be disadvantaged in visibility when the majority of the domain is based in the United States. Goldenberg, Libai, and Muller (2005) illustrate coauthor networks in marketing and argue that more connected scholars are more important in a scientific network. Therefore, work of more connected scholars can transfer more easily to the scientific network and receive more citations. Finally, the number of authors may also increase visibility. Because scholars have different opportunities to present their work (e.g., conferences, research camps, doctoral programs), the number of opportunities at which the work can be presented is bound to increase with the number of authors.

Personal promotion of academic scholars is often a cause for shame rather than pride. Although personal promotion may be an important driver of impact, some critics have raised concerns that it is driven by vanity (Bayer

1982). Self-referencing is a form of personal promotion (Van Dalen and Klamer 2005). First, it shows that the authors are confident in the findings, and it may underscore the importance of the work. If an author does not cite his or her own work, why should others cite it? Compare this with finance; if a person is not willing to invest in his or her own company, why should anyone else? Second, whereas one article may not have been noticed by peers, a follow-up article may be and thus could generate renewed interest in the original article. In this sense, good personal promotion is also related to the programmatic development of research (Bayer 1982). Third, a characteristic of a good salesperson is the use of the norm of reciprocity (Cialdini 1988; Jacobs et al. 2001). Reciprocity is “a social interaction where movement of one party evokes a compensating movement in some other party” (Houston and Gassenheimer 1987, p. 11). Scholars may feel indebted to scholars who cite their work and therefore may be more inclined to return the citation—in other words, “you cite me, and I’ll cite you” reciprocity. Thus, the extent to which scholars cite other people’s work, which we term “reference intensity,” may also cause their own work to be cited more.

H<sub>2</sub>: Social constructivist characteristics of an article affect the times the article is cited, in that (a) visibility positively affects the number of citations and (b) personal promotion positively affects the number of citations.

### **The Presentation Perspective**

The presentation perspective is that articles are cited for “how” the authors say what they say. We discern three dimensions within this perspective: (1) title length, (2) attention grabbers, and (3) expository clarity.

The title of an article is an important element of any scientific or scholarly article because it draws a reader’s attention and is used in electronic databases to store, search, and retrieve articles (Yitzhaki 2002). However, little is known about its effect on article citations. Longer article titles are more informative and thus may perform their functions more effectively, but they may also hint at article complexity (Yitzhaki 2002). Therefore, the direction of the effect of title length on article citations is difficult to posit *ex ante*.

The second dimension of presentation is the extent to which attention grabbers are included. Attention grabbers are words that have a special appeal because they raise attention. For example, the word “new” in the title may hint to the novelty of an article and therefore may positively influence the number of times an article is cited (Van Dalen and Klamer 2005). Although this phenomenon has gone unstudied so far, it might also be expected that the usage of the name of the discipline itself in the title has a special appeal to and thus grabs the attention of a large cross-section of scholars in the discipline. Finally, keywords may grab attention. Keywords are important because search engines scan databases through keywords. Especially in today’s academic environments, electronic searches are becoming more important in the search and retrieval of scientific articles. Although keywords overlap strongly with method types and subject areas and thus capture universalist characteristics, the number of keywords may increase the

likelihood of citation because keywords increase the chance that the article will appear in bibliographic searches.

Expositional clarity is the clarity with which an article explains what it says. This can be done by giving a graphic illustration of the conceptual model, adding tables that explain estimation issues or robustness checks, and referring complex issues to appendixes to improve the flow of an article. Furthermore, the use of equations or footnotes can affect clarity, though this effect may be context dependent. For example, although the usage of many equations may be more clarifying for mathematicians or statisticians, it can be obfuscating in other sciences, such as the social sciences. Expository clarity can also be operationalized by formal indexes of readability in linguistics (Flesch 1948). One such example is the Flesch formula:  $206.835 - [.846 \times (\text{number of syllables per 100 words})] - [1.015 \times (\text{average number of words per sentence})]$ . Overall, with increasing clarity, an article may be better able to promote its content and be more accessible for a wider audience.

H<sub>3</sub>: Presentation characteristics of an article affect the times the article is cited, in that (a) title length affects the number of citations, (b) the usage of attention grabbers positively affects the number of citations, and (c) expository clarity positively affects the number of citations.

## **Data**

### **Sample**

To represent the marketing discipline, we sampled five major journals: *IJRM*, *JCR*, *JM*, *JMR*, and *MKS*. These journals correspond with the journals that Stremersch and Verhoef (2005) use. Tellis, Chandy, and Ackerman (1999) argue that *JCR*, *JM*, *JMR*, and *MKS* may be a good representation of the field. However, because these are U.S.-based journals, we also include an international journal, of which *IJRM* is probably the best representative.

We inventoried all articles published in *JCR*, *JM*, *JMR*, and *MKS* from 1990 to 2002 and in *IJRM* from 1997 to 2002 (*IJRM* entered the Institute for Scientific Information’s Social Sciences Citation Index [ISI-SSCI] only in 1997). We excluded any articles with three pages or fewer (because these would be editorials, software reviews, book reviews, and so forth). Our final sample consisted of 1825 articles, 508 of which appeared in *JCR*, 351 of which appeared in *JM*, 504 of which appeared in *JMR*, 328 of which appeared in *MKS*, and 134 of which appeared in *IJRM*.

### **Measures**

*Dependent variable.* An article is “cited” when it is mentioned in the reference list of another article. We operationalize the number of citations as the number of citations in academic journals, excluding self-citations, an article received until December 31, 2004, from journals in the ISI-SSCI. Thus, the number of citations is the total number of occasions an article appeared in the reference list of articles in journals that are included in the ISI-SSCI, which contains a wide set of scientific journals. This data set was generated in August 2005 by an automatic algorithm, which was run

by a specialized institute in scientometric research (Center for Science and Technology Studies at Leiden University, the Netherlands) that has a subscription to ISI's databases.

The usage of citations is fairly common in the (admittedly sparse) scientometric literature on the drivers of article influence (e.g., articles reviewed in the introduction). Citations are an objective measure of influence, impact, or attention (Pieters and Baumgartner 2002).

*Independent variables: universalist perspective.* We discerned two dimensions within the universalist perspective: article quality and domain of the article. Rather than assess article quality ourselves, which would be inherently flawed, we relied on the quality assessment of editors and editorial boards. Because article order (u1) may be considered the editor's assessment of the strength of the contribution of an article, it may be a first indicator of article quality (Smart and Waldfogel 1996; Van Dalen and Henkens 2001). This also seems true in marketing (at least we could rule out one alternative ordering—alphabetically on the name of the first author, which the marketing journals we study do not consistently use). Article order is a reverse-coded measure anchored by "lead article" (1) to "last article in issue" (n).<sup>1</sup>

Because journal awards (u2) chosen by editorial boards (in marketing, editorial review boards typically comprise between 50 and 100 leading scholars) may be considered the choice of the highest-quality article by leading scholars, awards may be a second indicator. We include a dummy for winning one of the following best-article awards: Best Article Award (*JRM*), Best Article Award (*JCR*), Harold H. Maynard Award (*JM*), MSI/H. Paul Root Award (*JM*), Paul E. Green Award (*JMR*), William F. O'Dell Award (*JMR*), and John D.C. Little Award (*MKS*).<sup>2</sup>

A third indicator of quality may be article length (u3) because editors often provide specific guidance to authors on the length they will allow for the manuscript; article length may be considered a function of its contribution (i.e., contribution to length ratio). We operationalize article length as the number of pages of the article. Because the number of pages may be actively managed by the editor in function of the magnitude of the contribution (Peters and Van Raan 1994), it may be highly collinear with article order. However, in our sample of marketing journals, this appears not to be the case. The correlation between article length and article order is  $-.40$ . The reason for this relatively low correlation may be that though article order is the editor's prerogative, article length may also be influenced by the reviewers' assessments of the contribution of the article.

---

<sup>1</sup>Because some editors may choose only the lead article on the basis of quality, rather than the complete order of articles, this may be an alternative indicator of quality. We test it as such in the empirical section.

<sup>2</sup>Note that the selection of articles for awards is not based on number of citations, because they are chosen at the end of the publication year, and thus citations have not had time to materialize. An exception in this respect is the O'Dell Award, which is chosen five years after publication, but the results are robust to the exclusion of the O'Dell Award.

Prior research has discerned two categories of article domain: method type and subject area (Tellis, Chandy, and Ackerman 1999). We add a third: orientation. Orientation refers to whether the article has a behavioral (u4), quantitative (u5), or managerial orientation. We dropped the managerial orientation variable from our empirical tests because it showed a high correlation with behavioral orientation ( $-.81$ ). We code u4 as 1 when the article has a behavioral orientation (0 otherwise) and u5 as 1 when the article has a quantitative orientation (0 otherwise). When the article covered more than one orientation, we assigned all the respective orientations the value of 1. The second author of this article performed the content coding of these orientations. The coding is based on Kerin's (1996) description of marketing as a behavioral science, quantitative science, and managerial activity. Because this author had doubts about the assessment on 37 articles, the first author independently assessed these articles. Then, the first and second author compared their assessments of the 37 articles and found that only 2 differed, which were then assigned after discussion. Thus, the reliability of the procedure is high.

Method type (u6–u9) is the method the article uses. The second author examined all abstracts of the 1825 articles and classified them according to the presence of keywords for (1) conceptual (conceptual, theoretical, concept, and theory), (2) empirical (empirical or the type of study, such as secondary data, interview, field study, and so forth), (3) methodological (new methodology, new method, and methodological), and (4) analytical (mathematical, analytical, and mathematical equation). This procedure is similar to that of Tellis, Chandy, and Ackerman (1999). If the abstract did not identify any significant keyword to hint at the method type, the introduction of the article was examined ( $<20\%$ ), and in rare cases ( $<1\%$ ), the entire article was studied. The first and second author discussed all cases in which there could be doubt about the method type, seeking input from experts in the respective fields if necessary. Articles can use multiple method types.

Subject area (u10–u28) is the subject on which the article focuses. To identify subject area, we used a procedure similar to that for the identification of method type, though rather than directly classifying articles into categories, we described them by a set of keywords that actually appeared in the abstract. In total, we used approximately 1150 keywords. We then regrouped these keywords into 41 subgroups and then into 19 subject areas that we defined after frequent deliberation among coauthors. We assessed the reliability of this classification with the following procedure: *JM* and *JMR* each periodically publish the classification in subject areas for all articles they publish, using their own (and, occasionally, author-selected) subject areas. We assessed the overlap in the subject area classification by both journals with our classification of all articles in these two journals. In 84.2% of the cases, there was a perfect overlap between our classification and the *JM* and *JMR* classifications. In 8% of the cases, *JM* and *JMR* also identified other subject areas in addition to those we identified. When this was the case, we reexamined the article, and in 21% of such cases, we also included the additional subject area. In 7.8% of the cases, *JM* and *JMR* did not identify the

subject area we identified. In such cases, we again reexamined the article, and we reverted to the journal's assessment in 15% of such cases, but we kept our own article classification in the other cases. Overall, these results show a high reliability of our categorization when they are compared with interrater reliabilities that are deemed to be acceptable (85%) (Kassarjian 1977; Tellis, Chandy, and Ackerman 1999).<sup>3</sup> Articles can belong to multiple subject areas.

*Independent variables: social constructivist perspective.* We discern two dimensions within the social constructivist perspective: visibility and personal promotion. We operationalize visibility through the use of multiple measures. To reflect Merton's (1968) Matthew effect, we use (1) the authors' publication record (c1) by summing all authors' prior publications in *IJRM*, *JCR*, *JM*, *JMR*, and *MKS* since the journals' inception; (2) editorial board membership (c2) by including a dummy variable that indicates whether at least one of the authors has been a member of at least one of the editorial boards of the journals we studied between the year of publication of the article and two years after publication date (1 if so, and 0 if otherwise); and (3) the ranking of the business schools (c3) at which the authors hold positions by taking the average business school ranking in 2004 (provided by the *Financial Times*) across all authors. Business school ranking is a reverse-scored variable. Articles by authors who are affiliated with a high-ranking business school have a low value, whereas articles of authors who are affiliated with a low-ranking business school have a high value.

To reflect the other mechanisms described in the theory section, we also include centrality (c4), U.S. affiliation (c5), and number of authors (c6). Centrality is the minimum score across the authors of their individual centrality in the discipline. To find a researcher's centrality, it is necessary to find the shortest route of the author to all other researchers (based on coauthor relationships) and then to compute the average across all these paths (for more information, see Goldenberg, Libai, and Muller 2005). We inventoried this measure for each author in our database from the Web site [www.mconnectivity.com](http://www.mconnectivity.com); of 1688 authors, 82 yielded missing values, and 46 did not yield a value, because they were too separated to calculate centrality.<sup>4</sup> We used the April 2005 update of the Web site to inventory this measure. Information requested from [www.mconnectivity.com](http://www.mconnectivity.com) revealed that the delay in the update is a minimum of two months and a maximum of five months. Thus, April 2005 is

---

<sup>3</sup>We do not have such data on the other journals—*IJRM*, *JCR*, and *MKS*—and therefore we cannot conduct a similar analysis. Although our analysis shows that our classification is reliable for *JM* and *JMR* and though there does not seem to be any reason to expect any difference for the other journals, the reliability for these other journals may be higher or lower.

<sup>4</sup>Furthermore, we inventoried and included the two other variables of the marketing connectivity project by Goldenberg, Libai, and Muller (2005) in the models we present subsequently. However, the Lehmann number showed high collinearity with the average centrality, whereas the number of coauthors showed high collinearity with author publication record. Therefore, we dropped both from the analyses and included only the centrality measure.

the best update to use given that our dependent variable was based on all citations until December 31, 2004. Note that centrality is a reverse-scored variable. Articles with at least one author who is central to the discipline (i.e., has coauthored with many different researchers who, in turn, have coauthored with many different researchers) have a low value, whereas articles with all authors who are not central to the discipline (i.e., have coauthored with relatively few different researchers who, in turn, have coauthored with few different researchers) have a high value. U.S. affiliation is the share of all authors who have a U.S. affiliation, as stated on the article and inventoried using procedures similar to those of Stremersch and Verhoef (2005). Number of authors is the number of authors stated on the article.

We also operationalize personal promotion through the use of multiple measures to reflect our theoretical arguments. Reference intensity (c7) is the number of references the article cites. Self-citation intensity (c8) is the number of times the authors self-cited the article in future work until December 31, 2004.

*Independent variables: presentation perspective.* We discerned three dimensions in the presentation perspective: title length, the use of attention grabbers, and expository clarity. Title length (p1) is the number of significant words in the title, in line with the work of Yitzhaki (2002). Attention grabbers (p2–p5) are dummy variables for words in the title (coded as 1 when the word is included in the title and as 0 when this is not the case) that have a special appeal because they raise attention, such as “marketing” (p2), “market” (p3), and “new” (p4), and the number of keywords that are supplied by ISI (p5). The word “new” may hint at novelty (Van Dalen and Klamer 2005). The words “marketing” and “market” may be related to the core of the discipline. The number of keywords may affect the likelihood that the article is retrieved in electronic database searches.

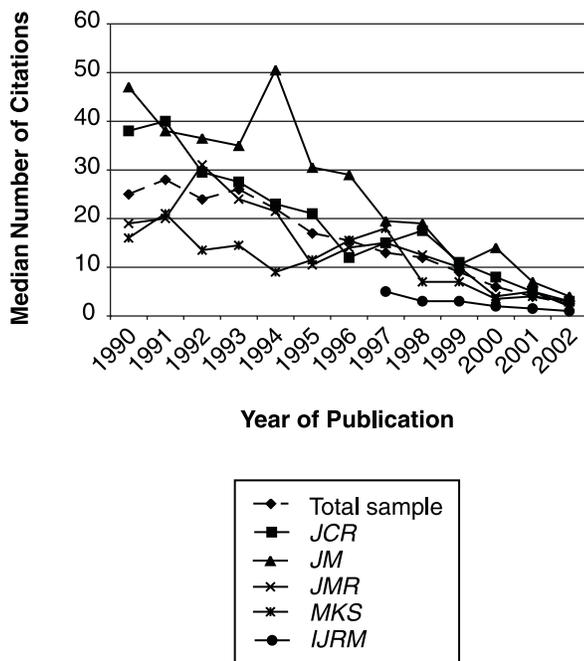
We measured expository clarity as number of equations (p6), number of figures (p7), number of tables (p8), number of footnotes (p9), and number of appendixes (p10) (these measures were inspired by the work of Ayres and Vars [2000]), as well as reading ease (p11) (this measure was inspired by the linguistics literature; e.g., Flesch 1948) (for an overview of all the measures, see Appendix A).

### **Sample Description**

*Dependent variable.* A first way to characterize article citations in our sample is to examine how many citations the median article in marketing obtains. Figure 2 displays the number of citations, excluding self-citations, the median article in each of the years in our sample has obtained to date. We present these numbers for the median article across journals and also per journal (as of December 31, 2004). Overall, articles in *JM* are cited more often than articles in any other major marketing journal. Conversely, *IJRM* is less cited than any other major marketing journal.

A second way is to assess which articles are the most influential in the marketing discipline. A simple examination of the raw number of citations an article received by December 31, 2004, may provide only limited insights. By

**FIGURE 2**  
**Median Number of Citations of Articles in Major Marketing Journals**



definition, the number of citations an article receives is driven by the age of the article, which is commonly modeled using a quadratic time trend (see also Ayres and Vars 2000; Landes and Posner 1996). Therefore, we specify the following equation:

$$(1) \quad \text{CITE}_k = \alpha + \gamma \times Q_k + \lambda \times Q_k^2 + \varepsilon_k,$$

where  $\text{CITE}_k$  is the number of citations article  $k$  received (excluding self-citations). The multiplicative terms capture the time dependence in citations, in which  $Q_k$  represents the number of quarters since the publication of article  $k$ . Because the procedure developed by Cameron and Trivedi (1990) shows that there is substantial overdispersion ( $p < .01$ ), we estimate the model specified in Equation 1 as a negative binomial model and estimate it using quasi-maximum likelihood procedures and the quadratic hill-climbing optimization algorithm, which does not suffer from this problem. We can subsequently rank all articles on the residual  $\varepsilon_k$  of Equation 1. From this ranking, it is possible to distill Table 1, which provides an overview of the 20 most-cited papers.

*Independent variables.* Table 2 describes our sample of articles along the drivers of citations. We offer a historical perspective in blocks of two years (except for the first year, 1990) in Appendix B because this may also show how the discipline has evolved over time, but we do not discuss it at length for reasons of brevity. Column 1 in Table 2 contains the driver. Column 3 contains a single number (which is a count) when it pertains to the number of articles in an orientation (u4–u5), method type (u6–u9), and subject area (u10–u28) and to the number of articles with attention-grabbing words in the title (p2–p4). Column 3 contains the average and the range in square brackets, for all other variables. In Appendix B, Columns 3–9 contain the average (u1–u3, c1–c8, p1, p5–p11) or the count (u4–u28, p2–p4) of all these variables for the subperiods.

At the level of the entire sample, for the variables in the universalist perspective, we conclude that 4% of all articles

**TABLE 1**  
**The 20 Most-Cited Articles Between 1990 and 2002**

Rank	Top 20 Most Cited (Corrected for Time)	Journal (Publication Year)	Number of Citations (Absolute Number, December 2004)
1	Hoffman and Novak	JM (1996)	227
2	Jaworski and Kohli	JM (1993)	347
3	Anderson and Narus	JM (1990)	384
4	Fournier	JCR (1998)	124
5	Kohli and Jaworski	JM (1990)	373
6	Narver and Slater	JM (1990)	358
7	Doney and Cannon	JM (1997)	170
8	Cronin and Taylor	JM (1992)	337
9	Day	JM (1994)	263
10	Alba et al.	JM (1997)	153
11	Ganesan	JM (1994)	254
12	Zeithaml, Berry, and Parasuraman	JM (1996)	178
13	Muniz and O'Guinn	JCR (2001)	34
14	Novak, Hoffman, and Yung	MKS (2000)	63
15	Bettman, Luce, and Payne	JCR (1998)	95
16	Lynch and Ariely	MKS (2000)	60
17	Garbarino and Johnson	JM (1999)	76
18	Slater and Narver	JM (1995)	185
19	Bitner	JM (1990)	260
20	Webster	JM (1992)	236

**TABLE 2**  
**Sample Characteristics for Independent Variables**

	Value	Entire Sample
<b>Universalist Perspective</b>		
Quality: article order (R)	Average [range]	4.5 [1, 27]
Quality: awards	Average [range]	.04 [0, 1]
Quality: article length	Average [range]	14.4 [4, 35]
Domain		
Orientation: behavioral	Count	1190
Orientation: quantitative	Count	483
Method type: conceptual	Count	754
Method type: empirical	Count	1412
Method type: methodological	Count	342
Method type: analytical	Count	297
Subject area: new products	Count	132
Subject area: business-to-business	Count	186
Subject area: relationship	Count	91
Subject area: brand and product management	Count	303
Subject area: advertising	Count	218
Subject area: pricing	Count	132
Subject area: promotions	Count	75
Subject area: retailing	Count	72
Subject area: strategy	Count	228
Subject area: sales	Count	78
Subject area: methodology	Count	255
Subject area: services	Count	61
Subject area: consumer knowledge	Count	225
Subject area: consumer emotions	Count	143
Subject area: other consumer behavior	Count	92
Subject area: consumption behavior	Count	145
Subject area: international marketing	Count	54
Subject area: other	Count	87
Subject area: e-commerce	Count	28
<b>Social Constructivist Perspective</b>		
Visibility: publication record	Average [range]	10.8 [0, 83]
Visibility: editorial board membership	Average [range]	.6 [0, 1]
Visibility: business school ranking (R)	Average [range]	59.1 [1, 101]
Visibility: centrality (R)	Average [range]	6.0 [4, 12.4]
Visibility: U.S. affiliation	Average [range]	.8 [0, 1]
Visibility: number of authors	Average [range]	2.2 [1, 7]
Personal promotion: reference intensity	Average [range]	46.2 [0, 313]
Personal promotion: self-citation intensity	Average [range]	2.1 [0, 37]
<b>Presentation Perspective</b>		
Title length	Average [range]	7.0 [1, 20]
Attention grabbers: marketing	Count	177
Attention grabbers: market	Count	157
Attention grabbers: new	Count	99
Attention grabbers: number of keywords	Average [range]	6.1 [1, 12]
Expositional clarity: number of equations	Average [range]	4.0 [0, 57]
Expositional clarity: number of figures	Average [range]	2.0 [0, 18]
Expositional clarity: number of tables	Average [range]	3.3 [0, 29]
Expositional clarity: number of footnotes	Average [range]	5.9 [0, 38]
Expositional clarity: number of appendixes	Average [range]	.6 [0, 9]
Expositional clarity: reading ease	Average [range]	22.9 [0, 58]
Number of observations		1825

Notes: R = reverse scored.

win a best-paper award and that average article length is 14.4 pages. Most articles have a behavioral orientation. Most articles in the marketing discipline also are empirical and develop a conceptual theory. As Appendix B shows, this is a constant throughout the 1990–2002 period. Brand and product management, methodology, strategy, consumer

knowledge, and advertising are the largest subject areas. From a historical perspective, the subject areas that have undergone a rise in interest are brand and product management (in the last two years), retailing (at the end of the 1990s), and e-commerce (especially at the turn of the century).

Next, we discuss the social constructivist variables. The sum of prior articles by authors (publication record), which is 10.8 over the entire sample, consistently increased with the rising maturity of the marketing discipline. Although 10.8 may be surprisingly high, note that this is the sum of prior articles by all authors of the article. Because the average number of authors is 2.2, the average number of prior articles per author for the journals in our database is 4.9. On average, 63% of all articles published in 1990–2002 in the five journals under study involve an editorial board member of one of these five journals. This has changed little over time. The average business school ranking for the authors of an article is 59.1, and the average centrality is 6.0. As Appendix B shows, the average share of U.S. authors declined from .9 to .7, an evolution that Stremersch and Verhoef (2005) also illustrate, and its overall sample mean is .8. The average number of references increased steeply from approximately 40 at the beginning of the 1990s to approximately 50 in most recent years, and the overall sample mean is 46. The average number of self-citations is 2.1.

Finally, we discuss the presentation variables. Articles have titles with an average count of seven significant words and, on average, include six keywords. The average article has four equations, two figures, three tables, and six footnotes. One in every two articles has an appendix, and the Flesch reading ease is, on average, 23, which is considered difficult (Bauerly, Johnson, and Singh 2005).

## Analysis

### Model

To assess the influence of article and author characteristics on citations, we specify the following model:

$$(2) \quad \text{CITE}_{kj} = \alpha + \sum_{i=1}^4 (\beta_i \times D_i) + \gamma_j Q_{kj} + \lambda_j Q_{kj}^2 + \sum_{r=1}^R \mu_r \times u_{rkj} + \sum_{s=1}^S \delta_s \times c_{skj} + \sum_{t=1}^T \theta_t \times p_{tkj} + \varepsilon_{kj},$$

where  $D_i = 1$  when  $i = j$  and 0 otherwise.

In this equation,  $\text{CITE}_{kj}$  represents the number of citations that article  $k$  in journal  $j$  gathers, and  $D_i$  represent the journal dummies (with  $MKS$  being the base alternative of which the main effect is captured in the intercept). The multiplicative terms capture the time dependence in citations, in which  $Q_{kj}$  represents the number of quarters since the article has been published. Thus, we allow the time dependence to vary across journals. The meaning of the other variables is as follows:  $\mu_r$  are parameters capturing the effects of universalist drivers of citations  $u_1$ – $u_R$  ( $R = 28$ ),  $\delta_s$  are parameters capturing the effects of social constructivist drivers of citations  $c_1$ – $c_S$  ( $S = 8$ ), and  $\theta_t$  are parameters capturing the effects of presentation drivers of citations  $p_1$ – $p_T$  ( $T = 11$ ). Again, we estimate this equation using a negative binomial specification, estimated with a quasi-maximum likelihood procedure and the quadratic hill-climbing optimization algorithm. We present our estimates and fit statistics in Table 3. In addition to the model in Equation 2 (Model 4),

we estimate three models: (1) a universalism model (Nested Model 1), (2) a social constructivism model (Nested Model 2), and (3) a presentation model (Nested Model 3). The number of observations is 1757, but this drops to 1531 when we include the number of keywords ( $p_5$ ) because it suffers from missing values.

### Fit and Robustness

The likelihood ratio index (LRI; also called McFadden's  $\rho$ -square) of our full model (as in Equation 2) is .241. This is satisfactory given the complex phenomenon we aim to explain. Moreover, the LRI has the property of being more stringent than a regular R-square measure because, in general, the LRI is substantially lower than the regular R-square. We also report the Akaike information criterion and the Schwarz information criterion. The fit statistics for Nested Models 1–3 show that Model 1 (universalist perspective) has the highest fit (LRI = .128), Model 2 (social constructivist perspective) has the second highest fit (LRI = .096), and Model 3 (presentation perspective) has the lowest fit (LRI = .080). We found that all models (1–4) provided a better fit to the data than a restricted model that contained only the other variables for which we controlled (journal dummies, including their interactions with time and time-squared).

We conducted several robustness checks. First, Models 1–4 in Table 3 show that the estimates are relatively similar across model specifications. Except for number of appendixes, none of the variables change sign. Significance levels are affected to some extent for several reasons, including the increasing number of parameters that are estimated (though there were no signs of harmful collinearity; for the correlation matrix, see Appendix C) and the drop in the number of observations when presentation is added (due to missing values on the number of keywords).

Second, because some journals have more articles per issue or more pages per article on average, such variables may also be standardized. We ran all our analyses with standardized variables, and standardization does not affect any of our findings.

Third, it might be argued that *IJRM* is a journal of a different nature than the other four: (1) It has a different and more diverse geographic background, and (2) we have data on far fewer articles in *IJRM* than any of the other journals in our sample. Therefore, we ran all our analyses without including any *IJRM* articles. The results we found are similar.

Fourth, we explored nonlinear effects of, for example, article length, productivity, centrality, title length, and the expositional variables by incorporating quadratic effects of these variables. However, none of these quadratic effects improve the model fit. We also explored interaction effects, which also did not improve model fit and were unstable.

Fifth, we tested different methods of controlling for the age of an article in several ways. A first method was to include  $q + \ln q$  as a time trend rather than  $q + q^2$ . The model results were exactly the same. A second method was to fix the duration we allow for an article to obtain citations. We fixed this duration to four years. Again, our findings were the same, except for one estimate (which captured the influ-

**TABLE 3**  
**Estimation Results for Equation 2**

Variable	Nested Model 1		Nested Model 2		Nested Model 3		Full Model	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
<b>Universalist Perspective</b>								
Quality: article order (R)	-.02***	.01					-.02**	.01
Quality: awards	.53***	.08					.34***	.08
Quality: article length	.05***	.00					.04***	.01
Domain								
Orientation: behavioral	-.01	.06					.04	.05
Orientation: quantitative	-.02	.07					.03	.07
Method type: conceptual	.00	.05					-.02	.04
Method type: empirical	-.00	.06					-.04	.06
Method type: methodological	-.24***	.08					-.11	.09
Method type: analytical	-.41***	.08					-.13	.09
Subject area: new products	.00	.08					.05	.09
Subject area: business-to-business	.09	.08					.09	.08
Subject area: relationship	.61***	.10					.55***	.09
Subject area: brand and product	-.06	.06					.07	.06
Subject area: advertising	-.32***	.06					-.28***	.06
Subject area: pricing	-.04	.08					.02	.08
Subject area: promotions	-.06	.10					-.03	.10
Subject area: retailing	-.07	.09					.05	.09
Subject area: strategy	-.05	.07					-.05	.07
Subject area: sales	-.37***	.10					-.32***	.09
Subject area: methodology	-.03	.09					-.01	.09
Subject area: services	.47***	.11					.53***	.10
Subject area: consumer knowledge	-.10	.07					-.14**	.06
Subject area: consumer emotions	-.02	.07					-.03	.07
Subject area: other consumer behavior	.01	.10					.03	.10
Subject area: consumption behavior	-.03	.08					.05	.08
Subject area: international marketing	.27**	.13					.05	.11
Subject area: other	-.32***	.09					-.23**	.09
Subject area: e-commerce	.74***	.17					.77***	.17
<b>Social Constructivist Perspective</b>								
Visibility: publication record	.00	.00					.00*	.00
Visibility: editorial board membership	.14***	.05					.14***	.04
Visibility: business school ranking (R)	-.00***	.00					-.00***	.00
Visibility: centrality (R)	.10**	.04					.10**	.04
Visibility: U.S. affiliation	.16**	.08					.00	.07
Visibility: number of authors	-.01	.03					-.06**	.02
Personal promotion: reference intensity	.01***	.00					.00	.00
Personal promotion: self-citation intensity	.10***	.01					.08***	.01

**TABLE 3**  
Continued

Variable	Nested Model 1		Nested Model 2		Nested Model 3		Full Model	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
<b>Presentation Perspective</b>								
Title length								
Attention grabbers: marketing								
Attention grabbers: market								
Attention grabbers: new								
Attention grabbers: number of keywords								
Expositional clarity: number of equations								
Expositional clarity: number of figures								
Expositional clarity: number of tables								
Expositional clarity: number of footnotes								
Expositional clarity: number of appendixes								
Expositional clarity: reading ease								
<b>Other Variables</b>								
Intercept								
JCR								
JM								
JMR								
IJRM								
Q <sub>JCR</sub>								
Q <sub>JM</sub>								
Q <sub>JMR</sub>								
Q <sub>IJRM</sub>								
Q <sub>MKS</sub>								
Q <sub>JCR</sub> <sup>2</sup>								
Q <sub>JM</sub> <sup>2</sup>								
Q <sub>JMR</sub> <sup>2</sup>								
Q <sub>IJRM</sub> <sup>2</sup>								
Q <sub>MKS</sub> <sup>2</sup>								
<b>Fit Statistics</b>								
Akaike information criterion								
Schwarz information criterion								
LRI								
Number of observations								

\*  $p < .10$  (two-sided tests).  
 \*\*  $p < .05$  (two-sided tests).  
 \*\*\*  $p < .01$  (two-sided tests).  
 Notes: R = reverse scored.

ence of the subject area “other”) that became less significant and one estimate (which captured the influence of the subject area “retailing”) that became more significant. Two more estimates became more significant (for tables and appendixes), but their sign was counter to theoretical expectations (negative).

Sixth, it might be asked whether the effect of article order is continuous, as is modeled now, or whether it is reflective of a “lead article” phenomenon. To test this, we also estimated a model in which we replaced the variable article order with a lead article variable, which took the value of 1 when the article was the lead article in an issue and the value of 0 when the article was not the lead article. We found similar results. For the awards variable, it might be argued that because the O’Dell Award considers a long period (five years), the award committee may include the number of citations of an article as an implicit criterion, leading to endogeneity. Therefore, we also estimated a model in which the O’Dell Award is not taken into account. Again, we found similar results.

Seventh, business school rankings are always debated, regardless of the source. We also operationalized this variable using *BusinessWeek’s* rankings and tried different types of operationalizations (dummies when the school was included in the ranking or not, average rank across authors, and minimum rank across authors). The results remain highly similar. The reason we report the measure based on the *Financial Times*, rather than the measure based on *BusinessWeek*, is that *BusinessWeek* is more U.S. based, whereas *Financial Times* is perceived as more global. Next, we detail our estimates and test our hypotheses.

### Hypotheses Testing

Table 4 provides an overview of our hypotheses, the underlying theoretical arguments, and the results of our testing. The results are based on the findings for the individual effects in Table 3, which we discuss next. In confirmation of  $H_{1a}$ , we find that article quality—as reflected by article order ( $\mu_1 = -.02, p < .05$  [reverse-scaled]), awards ( $\mu_2 = .34,$

$p < .01$ ), and article length ( $\mu_3 = .04, p < .01$ )—has a significant, positive effect on article citations.

We also find that domain affects article citations. This seems to apply mostly to the subject area and less to the orientation or the method type; articles that use methodological ( $\mu_8 = -.24, p < .01$ ) and analytical ( $\mu_9 = -.41, p < .01$ ) method types are cited less than those that use conceptual theory and empirical articles in Nested Model 1 but not in the full model. Articles on relationship marketing ( $\mu_{12} = .55, p < .01$ ), services marketing ( $\mu_{21} = .53, p < .01$ ), and e-commerce ( $\mu_{28} = .77, p < .01$ ) tend to be cited more than other articles, whereas articles on advertising ( $\mu_{14} = -.28, p < .01$ ), sales ( $\mu_{19} = -.32, p < .01$ ), consumer knowledge ( $\mu_{22} = -.14, p < .05$ ), and other topics ( $\mu_{27} = -.23, p < .05$ ) tend to be cited less than other articles. Given full confirmation of  $H_{1a}$  and partial confirmation of  $H_{1b}$ , we find support for the universalist perspective on article citations.

Providing partial confirmation for the positive effect of visibility on article citations ( $H_{2a}$ ), we find that publication record ( $\delta_1 = .00, p < .10$ ), editorial board membership ( $\delta_2 = .14, p < .01$ ), and business school ranking ( $\delta_3 = -.00, p < .01$  [reverse-scaled]) positively affect the number of citations an article receives, but the effects we find for centrality ( $\delta_4 = .10, p < .05$  [reverse-scaled]) and number of authors ( $\delta_6 = -.06, p < .05$ ) run counter to our expectations. A reason the articles of central authors may receive fewer citations than the articles written by authors who are less central to the discipline may be that in addition to visibility, the articles differ in content. The contributions of central authors may be more incremental, whereas impactful breakthroughs may develop especially at the boundaries of the discipline. A reason the articles with more authors may be less influential than those with fewer authors is that authors may be less committed to promote the article when there are many authors because of a lack of intellectual ownership. Thus, visibility of an article may actually decrease with increasing number of authors. Finally, we find that the effect of U.S. affiliation becomes nonsignificant in the full model (compared with Nested Model 2). This contrasts

**TABLE 4**  
Overview of the Hypotheses, the Underlying Theory, and the Results

Theoretical Perspective	Dimension	Effects		Underlying Theory
		Hypothesis	Confirmed?	
Universalism	Quality	$H_{1a}$ (+)	Yes	Inspiration Reliability
	Domain	$H_{1b}$ (+/-)	Partial	Domain size Relevance Maturation Divergence in citation practices
Social constructivism	Visibility	$H_{2a}$ (+)	Partial	Attention
	Personal promotion	$H_{2b}$ (+)	Partial	Confidence in findings Attention Indebtedness
Presentation	Title length	$H_{3a}$ (+/-)	No	Information content
	Attention grabbers	$H_{3b}$ (+)	No	Complexity Attention
	Expositional clarity	$H_{3c}$ (+)	Partial, at best	Accessibility Ability to promote content

with prior research by Stremersch and Verhoef (2005) and may have two predominant reasons. First, U.S. author affiliation may covary with other author and article characteristics that are already covered by the other variables we include in the full model. Second, the significant drop in number of observations (in the full model as compared with Nested Model 2) increases the threshold for significance.

Providing partial confirmation for  $H_{2b}$ , we find that personal promotion—as operationalized by self-citation intensity ( $\delta_8 = .08, p < .01$ )—positively affects the number of citations an article receives, though it does not do so when operationalized as reference intensity ( $\delta_7 = .00, p > .10$ ). Overall, we find support for the social constructivist perspective on the number of citations an article receives.

In contrast, we find only fragile evidence for the presentation perspective, as postulated in  $H_3$ . We find that title length does not affect the number of citations. Thus, we do not find any confirmation for  $H_{3a}$ .

Attention grabbers in marketing do not seem to be as effective as we postulated. The effects are inconsistent across models, and overall they are weak. The only effect that is significant, though it is only marginally significant, is the use of the word “market” ( $\theta_3 = .14, p < .10$ ). However, closer inspection shows that this is entirely due to the term “market orientation,” which has become an impactful concept in marketing (see Table 1). We conclude that there is no confirmation for  $H_{3b}$ .

Furthermore, the results for expositional clarity are mixed, at best. We find that there is a negative effect of the number of equations ( $\theta_6 = -.01, p < .05$ ) and a positive effect of the number of appendixes ( $\theta_{10} = .00, p < .01$ ) on citations. Contrary to our expectations, we find that reading ease negatively affects citations ( $\theta_{11} = -.02, p < .01$ ). The reason may be that expositional clarity in general and readability in particular are not always considered positive by peers. Metoyer-Duran (1993) finds higher readability scores among rejected than accepted articles, and Armstrong (1980) finds that peers rate less readable articles of higher quality, even when the content is exactly the same. Overall, we conclude that the evidence for  $H_{3c}$  is mixed.

## Discussion

### Conclusion

In this article, we contrasted, synthesized, and simultaneously tested three theoretical perspectives on the influence of article and author characteristics on the number of citations an article receives. We found full or partial confirmation for the universalist and social constructivist view on science, but we found virtually no confirmation for the presentation view on science. Our findings contribute to the marketing and scientometrics literature. In the marketing context, to the best of our knowledge, this study is the first to examine drivers of article citations in a comprehensive and structured manner. Given the recent surge in attention for scientometric issues in the marketing discipline, this article is likely to stimulate intense debate, both positive and negative. However, this debate among marketing scholars is greatly needed, not only for the marketing discipline’s

sake. If marketing scholars do not debate drivers of citations (which are essentially a “marketing of science” problem), who else should, can, or will?

In the scientometrics context, this study adds to the few scientometric studies that aim to explain article citations. It is the first to rigorously develop and simultaneously test the three perspectives and come to a clear synthesis. It also adds new variables to prior operationalizations of these three perspectives, such as awards (in the universalistic perspective); editorial board membership, business school ranking, centrality, and self-citation intensity (in the social constructivist perspective); and title length and attention grabbers that refer to the domain (in the presentation perspective).

### Implications for Scientific Stakeholders

This research has several implications for scientific stakeholders. We discern two main scientific stakeholders: the management of scientific journals (editor, editorial board, sponsoring associations, and publisher) and the academic scholar.

*The management of journals.* Managers of scientific journals strive to maximize the impact of their journal and, thus, the articles it publishes. This article shows that quality, which, in its widest meaning, is the dominant “acceptance” criterion that journals use, should not be editors’ only concern. Several other considerations should come into play.

First, editors should be aware of the possible influence of particular domains. We identified subject areas in which articles typically receive more citations than average. We found that articles in the e-commerce domain wielded the greatest influence and have been truly pathbreaking because they mark the start of an entirely new line of research. The relative higher impact for articles on services and relationships reflects the increasing importance of these two domains in marketing in recent years (Vargo and Lusch 2004). Following this development, editors have called for more research in this area (e.g., Bolton 2003). When it is decided for other reasons to nurture domains in which articles have less-than-average influence, journal managers may seek alternative means of promoting this work (e.g., adding a special conference, commentaries).

Second, we found that article length positively affects citations. Because article length is important, there is a clear argument for journals to “invest” in more journal space, even if the number of submissions and acceptances remains constant. This fits McAlister’s (2005) recent conceptual argument on journal space.

Third, because highly productive scholars have more influence in general, a fair question is whether editors should strive to stimulate submissions from such authors. This could be done by actively soliciting or inviting manuscripts from these authors and visiting departments with many productive scholars on appointment. Although the former approach has been implemented by *JMR* (e.g., under the term of the late Dick Wittink), the latter is followed by almost all editors who took tenure at a major marketing journal over the last five years. However, such an approach may also be criticized. Although it may increase the journal’s impact, it may also enhance the Matthew effect (Mer-

ton 1968) in science, which may conflict with the “true” (universalist) motivation of scientists.

Fourth, our findings suggest challenges for editors in making their journal more relevant to practitioners. The Matthew effect we cited previously is contained within marketing academia. Practitioners may have their own pecking order. Thus, strengthening the Matthew effect may be detrimental to practical relevance. In addition, it is conceivable that more readable articles will have a greater impact on practice. At the same time, however, we find that it may hurt citations by negatively affecting an article’s credibility. Thus, editors must engage in a balancing act between the academic audience and their (potential) practitioner audience.

Fifth, our finding that personal promotion—as operationalized by self-citation intensity—affects article citations also has implications for journals. Reviewers and editors should probably be lenient on self-citations and not necessarily view them as researcher vanity but rather as a sign of programmatic development and good personal promotion.

*The academic scholar.* Because our research shows that high-quality research is cited more than low-quality research, the prime stimulus of academics to produce new knowledge with high rigor remains. However, our study has some clear implications for the individual academic scholar that may not be straightforward or at least not always on academics’ minds.

First, career orientation toward specific subject areas is an important consideration. Although such decisions are driven by interest and expertise, an academic scholar who seeks strong influence in the discipline may also account for other aspects, such as the influence prior work in these areas has typically wielded. A subject area’s popularity itself evolves over time, and thus the results in Table 3 cannot provide a guide for the future but only a reflection of the past. Second, because publication record affects citations through visibility, it may be worthwhile to cooperate with highly experienced coauthors when an author does not have much of a record him- or herself. Third, in the review process, some editors may push authors to reduce article length. In our personal experience and from talking to colleagues, authors seem to comply easily with these guidelines. However, the results encourage authors to “fight back” on this and, rather than immediately conceding to editors, devote more effort to convincing editors that article size is appropriate by emphasizing the contribution they make to the literature—that is, if the disagreement on article size stems from a lack of information on the editor’s part rather than an overly positive assessment of the author toward his or her own work.

### ***Implications for Practitioners***

This article also has several implications for practitioners. First, Table 2 and Appendix B inventory the marketing discipline along many different characteristics and the evolution therein over the 1990–2002 period. This is informative to practitioners because it shows, for example, the extent to which the discipline or journals can reflect on decision areas they face.

Second, Table 1 contains the 20 articles that, after we correct for time, have had the greatest impact on the advancement of scientific knowledge in the marketing discipline. An academically interested marketer may consider reading these top 20 articles to develop an understanding of important paradigms in marketing.

Third, the results at least hint that articles that aim to have a high impact in marketing science may be different from articles that aim to have a high impact on marketing practice. For example, social constructivist characteristics of authors that positively influence academic citations (e.g., editorial board membership, self-citation behavior) may be different from social constructivist characteristics of authors that positively influence impact in practice. The latter are likely to include membership of business communities rather than editorial board membership and referencing in business press and newspapers rather than self-citations in academic journals. The academic community may have a different pecking order (e.g., the Matthew effect) than practitioners, which is problematic given that the elements that determine the academic pecking order may be idiosyncratic to marketing academia and may not be relevant to practitioners.

Fourth, the results on presentation hint that scientific impact does not have much to gain from expositional clarity. If researchers act to maximize citations (which seems to be the current driving force at many top business schools), this finding does not hold great promise for the future readability of journals for practitioners. Although journals and scholars alike should act to build stronger bridges with practice, the question remains whether top journals will provide good (and readable) sources to practitioners for new marketing knowledge in the future, a concern that Bauerly, Johnson, and Singh (2005) also express.

Fifth, it is encouraging that we find that article quality is the most important driver of citations. However, whether there is a relationship between what academics judge to be a high-quality article and what practitioners deem relevant is a question that needs further investigation.

### ***Research Limitations***

First, although we discerned different method types of articles, we did not distinguish different empirical methodologies within the empirical method type. Further research that investigates differentiation between methodologies would be most helpful, but it should go a step further than merely differentiating between lab experiments and field data, as prior studies have done (e.g., Bettencourt and Houston 2001a; Tellis, Chandy, and Ackerman 1999). A related limitation that also applies to the subject area variables is the inherent flaws in categorization. Although we see no way to improve categorization and though our method seems to compare favorably with other categorizations in accuracy, it is a matter of concern, and caution should be taken in the interpretation of the findings.

Second, we focused on the number of citations an article generates, excluding self-citations. This is consistent with prior scientometric studies on influence or attention. However, focusing on citations also has shortcomings

(Baumgartner and Pieters 2003). That is, article citations may not always reflect transfer of knowledge or intellectual indebtedness but may, for example, be irrelevant or driven by strategic considerations (e.g., citing a possible reviewer) (Baumgartner and Pieters 2003). Therefore, further research that examines other measures of influence may be fruitful—for example, (1) the amount of press attention (e.g., citations in *The Wall Street Journal*, *The Economist*, or *BusinessWeek*) a scientific article obtains, (2) the amount of educational attention (e.g., inclusion in textbooks, marketing classics volumes, or business school class readings) it gets, and (3) the amount of “Web” attention (e.g., downloads) it gets.

Third, some of our measures for the independent variables are limited. We measure article quality by article order, awards, and article length, but these measures may also be related to visibility. Visibility is a different causal mechanism than quality, and using our measures, we may not be able to separate out both mechanisms clearly. Although future studies that develop better quality indicators may be valuable, it is unclear what indicators those would be. An alternative may be judgment by experts.

Finally, this article opens up new issues that are not necessarily shortcomings of the current study. First, little is still understood about citation patterns at the individual article level. For example, why does Article A cite Article B? Research that builds on Baldi’s (1998) prior insights and method promises to be fruitful. Such research would also have high relevance in marketing, given that it can be tied to prior work on the influence of marketing in other domains (see, e.g., Baumgartner and Pieters 2003; Pieters and Baumgartner 2002; Pieters et al. 1999) and coauthor networks

(Goldenberg, Libai, and Muller 2005). It can also be tied to the finding regarding editorial board membership. We found that editorial board members were cited more than scholars who are not editorial board members. Considerable gamesmanship in citing editorial board members may underlie this finding. A course that could be taken to investigate this issue would be to examine whether joining the board of a journal causes a regime break in the number of citations for articles in that same journal that were (co)authored by that new board member. The difficulty of such a research endeavor is in determining the appropriate time lag to consider because the effect takes place on submission, not on publication, of an article.

Second, how do disciplines compare with one another in the factors that drive article citations? For example, how does the marketing discipline compare with other business disciplines or some of its source disciplines, such as economics, sociology, and psychology? How do the social sciences compare with the natural sciences? These are valid questions worthy of empirical investigation.

Third, we focus almost exclusively on the impact of articles on further scientific development through citations. However, a vast area remains unexplored; namely, what is the influence of scientific articles on marketing practice? Empirical investigation of this question is of high importance to the field.

In summary, this article contributes to early scientometric insights on the influence of article and author characteristics on article citations, but it leaves many related issues open for further investigation. However, as the quest for citations is a prime extrinsic motivation for scientists, it deserves more attention.

## APPENDIX A Measurement of Variables

Variable	Symbol	Definition	Measurement Description
<b>Dependent Variable</b>			
Citation	CITE	Number of citations the article has received.	Count of the number of citations the article has received until end of December 2004 from journals in the ISI-SSCI.
<b>Independent Variables</b>			
<b>Universalism</b>			
<i>Quality</i>			
Article order (R)	u1	Article order in journal issues.	1 (lead article in journal issues) ... n (last article in journal issues).
Awards	u2	Whether the article received a best-article award.	Dummy: 0 (if the article did not win a best-article award) or 1 (if the article won a best-article award), based on best-article awards at <i>JCR</i> and <i>IJRM</i> , the Harold H. Maynard Award and the MSI/H. Paul Root Award at <i>JM</i> , the Paul E. Green Award and the O’Dell Award at <i>JMR</i> , and the J.D.C. Little Award at <i>MKS</i> .
Article length	u3	Length of the article.	Count of the number of pages of the article.

**APPENDIX A**  
**Continued**

Variable	Symbol	Definition	Measurement Description
<i>Domain</i>			
Orientation	u4–u5	The orientation of the article: behavioral or quantitative.	Two dummies: behavioral and quantitative (0 = does not belong to orientation, and 1 = belongs to orientation). An article may cover multiple orientations.
Method type	u6–u9	Type of method the article uses: conceptual, empirical, methodological, and analytical (Tellis, Chandy, and Ackerman 1999).	Four dummies: conceptual, empirical, methodological, and analytical (0 = does not belong to method type, and 1 = belongs to method type). An article may cover multiple method types.
Subject area	u10–u28	Subject area the article covers.	19 dummy variables indicating whether the article covers a subject area (0 = no coverage, and 1 = coverage). An article may cover multiple subject areas.
<b>Social Constructivism</b>			
<i>Visibility</i>			
Publication record	c1	The publication productivity of all authors in the five considered journals.	Summation of the number of prior publications of all authors before the article appeared in the five journals we consider.
Editorial board membership	c2	Whether there is a connection between the authors of an article and an editorial board.	Dummy indicating whether at least one of the authors of an article has been a member of the editorial board of <i>JCR</i> , <i>JM</i> , <i>JMR</i> , <i>MKS</i> , or <i>IJRM</i> between the year of publication of the article and two years after publication (0 if this is not the case, and 1 if this is the case).
Business school ranking (R)	c3	The <i>Financial Times</i> business school ranking of all authors of the article.	The average business school ranking of all the authors of an article (based on the business school ranking of <i>Financial Times</i> in 2004).
Centrality (R)	c4	The degree to which the author team is connected to other researchers in the discipline.	The minimum score across the authors on the article of their individual centrality in the discipline. To calculate individual centrality of a researcher, the shortest route of this researcher to all other researchers (based on coauthor relationships) must be found, and then the average across all these paths must be computed.
U.S. affiliation	c5	Affiliation of the authors to U.S. universities or institutions.	Share of all authors of the article having a U.S. affiliation.
Number of authors	c6	Number of authors of the article.	Count of the number of authors of the article.
<i>Personal Promotion</i>			
Reference intensity	c7	Number of references in the article.	Count of the number of references in the reference list of the article.
Self-citation intensity	c8	Intensity with which authors of the article cite their own prior work.	Count of the number of self-citations by all authors of the article until December 31, 2004.
<b>Presentation</b>			
<i>Title Length</i>			
Title length	p1	Length of the title of the article.	Count of the number of significant words in the title of article.

**APPENDIX A**  
**Continued**

<b>Variable</b>	<b>Symbol</b>	<b>Definition</b>	<b>Measurement Description</b>
<i>Attention Grabbers</i>			
"Marketing" in title	p2	The presence of the word "marketing" in the title.	Dummy indicating whether the word "marketing" is present in the title of the article (0 = not present, and 1 = present).
"Market" in title	p3	The presence of the word "market" in the title.	Dummy indicating whether the word "market" is present in the title of the article (0 = not present, 1 = present).
"New" in title	p4	The presence of the word "new" in the title.	Dummy indicating whether the word "new" is present in the title of the article (0 = not present, 1 = present).
Number of keywords	p5	The number of keywords for the article.	Count of the number of keywords as assigned by ISI.
<i>Expositional Clarity</i>			
Number of equations	p6	Number of equations in the article.	Count of the number of equations in the article.
Number of figures	p7	Number of figures in the article.	Count of the number of figures in the article.
Number of tables	p8	Number of tables in the article.	Count of the number of tables in the article.
Number of footnotes	p9	Number of footnotes in the article.	Count of the number of footnotes in the article.
Number of appendixes	p10	Number of appendixes in the article.	Count of the number of appendixes in the article.
Reading ease	p11	Flesch reading ease score.	The Flesch reading ease score is obtained by the formula: $206.835 - [.846 \times (\text{number of syllables per 100 words})] - [1.015 \times (\text{average number of words per sentence})]$ . The text is easier to understand as the score is higher.

Notes: R = reverse scored.

**APPENDIX B**  
**Sample Descriptives over Time of Independent Variables**

Symbol	2001-2002	1999-2000	1997-1998	1995-1996	1993-1994	1991-1992	1990
<b>Universalist Perspective</b>							
Quality: article order (R)	5.0	4.7	4.3	5.5	5.4	5.1	5.1
Quality: awards	.03	.04	.04	.04	.03	.03	.02
Quality: article length	14.9	15.5	14.9	13.9	14.7	13.2	12.5
<b>Domain</b>							
Orientation: behavioral	204.0	165.0	186.0	157.0	204.0	177.0	97.0
Orientation: quantitative	83.0	77.0	76.0	85.0	54.0	77.0	31.0
Method type: conceptual	137.0	125.0	129.0	95.0	110.0	96.0	62.0
Method type: empirical	230.0	226.0	240.0	203.0	215.0	204.0	102.0
Method type: methodological	53.0	48.0	50.0	66.0	45.0	55.0	25.0
Method type: analytical	53.0	42.0	48.0	41.0	50.0	42.0	21.0
Subject area: new products	18.0	24.0	36.0	18.0	13.0	14.0	9.0
Subject area: business-to-business	25.0	36.0	34.0	26.0	29.0	26.0	10.0
Subject area: relationship	15.0	19.0	22.0	8.0	15.0	11.0	1.0
Subject area: brand and product	62.0	42.0	43.0	41.0	52.0	40.0	23.0
Subject area: advertising	25.0	28.0	29.0	31.0	42.0	36.0	27.0
Subject area: pricing	28.0	25.0	18.0	22.0	13.0	21.0	5.0
Subject area: promotions	15.0	7.0	10.0	18.0	8.0	8.0	9.0
Subject area: retailing	16.0	10.0	18.0	11.0	5.0	8.0	4.0
Subject area: strategy	39.0	30.0	43.0	41.0	33.0	31.0	11.0
Subject area: sales	11.0	10.0	12.0	9.0	20.0	9.0	7.0
Subject area: methodology	42.0	43.0	27.0	39.0	32.0	47.0	25.0
Subject area: services	8.0	8.0	11.0	9.0	13.0	9.0	3.0
Subject area: consumer knowledge	40.0	31.0	28.0	32.0	35.0	40.0	19.0
Subject area: consumer emotions	29.0	24.0	20.0	17.0	22.0	21.0	10.0
Subject area: other consumer behavior	9.0	7.0	14.0	10.0	23.0	22.0	7.0
Subject area: consumption behavior	21.0	15.0	22.0	16.0	27.0	29.0	15.0
Subject area: international marketing	10.0	14.0	11.0	3.0	10.0	4.0	2.0
Subject area: other	19.0	14.0	11.0	11.0	15.0	13.0	4.0
Subject area: e-commerce	11.0	12.0	2.0	2.0	1.0	.0	.0
<b>Social Constructivist Perspective</b>							
Visibility: publication record	11.8	11.9	10.9	11.9	10.0	8.6	9.2
Visibility: editorial board membership	.7	.6	.5	.7	.6	.6	.5
Visibility: business school ranking (R)	59.8	56.2	57.9	58.3	62.8	58.8	60.2
Visibility: centrality (R)	6.0	6.0	5.9	5.9	6.0	5.9	6.0
Visibility: U.S. affiliation	.7	.8	.8	.8	.9	.9	.9
Visibility: number of authors	2.2	2.3	2.3	2.2	2.2	2.0	2.0
Personal promotion: reference intensity	47.6	50.4	46.3	44.8	48.6	42.1	39.5
Personal promotion: self-citation intensity	.7	1.4	2.4	2.3	2.6	2.7	2.9

**APPENDIX B**  
Continued

	Symbol	1999–2000	2001–2002	1997–1998	1995–1996	1993–1994	1991–1992	1990
<b>Presentation Perspective</b>								
Title length	p1	7.2	7.5	7.0	6.8	7.0	6.9	6.8
Attention grabbers: marketing	p2	39.0	28.0	25.0	21.0	25.0	25.0	14.0
Attention grabbers: market	p3	29.0	34.0	18.0	28.0	21.0	18.0	9.0
Attention grabbers: new	p4	20.0	17.0	26.0	14.0	9.0	6.0	5.0
Attention grabbers: number of keywords	p5	6.7	6.9	6.1	5.7	5.9	5.2	6.1
Expositional clarity: number of equations	p6	3.9	3.9	4.3	5.0	3.3	3.8	3.8
Expositional clarity: number of figures	p7	2.2	2.1	2.1	2.0	1.9	2.0	1.5
Expositional clarity: number of tables	p8	3.7	3.1	3.8	3.3	3.3	3.0	2.7
Expositional clarity: number of footnotes	p9	7.1	5.2	6.2	5.9	6.1	5.2	5.0
Expositional clarity: number of appendixes	p10	.5	.6	.6	.8	.6	.5	.3
Expositional clarity: reading ease	p11	22.4	22.5	23.1	23.6	22.6	23.3	23.1
<b>N</b>		<b>283</b>	<b>308</b>	<b>293</b>	<b>262</b>	<b>283</b>	<b>261</b>	<b>135</b>

Notes: R = reverse scored.

APPENDIX C  
Correlation Matrix

CITE	u1	u2	u3	u4	u5	u6	u7	u8	u9	u10	u11	u12	u13	u14	u15	u16	u17	u18	u19	u20	u21	u22	u23					
1.00																												
-.12	1.00																											
-.17	-.17	1.00																										
.08	-.40	.16	1.00																									
.10	.01	-.05	1.00																									
-.12	.04	-.05	.09	1.00																								
-.12	.05	.02	.09	.09	1.00																							
.00	-.02	-.09	.00	.20	-.12	1.00																						
-.10	.08	.00	-.09	-.15	.43	-.37	1.00																					
-.09	-.09	.02	-.18	-.18	.48	-.30	.21	1.00																				
-.01	.00	.05	.01	-.19	.03	.04	.04	.00	1.00																			
.16	-.04	.00	.08	.08	-.03	.06	.06	.07	.08	1.00																		
-.06	-.03	.03	.00	.13	.02	-.07	.10	.05	.03	.09	1.00																	
-.04	.02	.00	-.06	.13	-.12	.00	.09	-.10	-.04	-.09	-.11	1.00																
-.06	-.04	.02	.05	-.02	.07	-.06	.00	.02	.17	-.05	-.07	-.06	.01	1.00														
-.05	.02	.00	.01	.01	.06	-.07	.05	.03	.11	-.06	.03	-.05	.03	.02	1.00													
-.04	-.03	.00	.09	-.02	.04	-.03	.01	-.03	.12	.06	.01	-.03	-.02	.03	.02	1.00												
.01	-.05	.05	.09	-.32	.08	-.01	-.08	-.03	.16	.07	.04	-.06	-.09	.06	.05	.00	1.00											
-.02	.00	-.03	.03	.00	-.01	.05	.00	.06	.06	-.05	-.03	-.09	-.09	-.04	.01	-.02	.06	1.00										
-.07	.12	-.06	-.11	-.10	.25	-.22	.15	.47	-.10	-.09	-.13	-.09	-.13	-.14	-.09	-.08	.07	.09	1.00									
-.19	-.02	.01	.03	.04	-.03	.08	.03	.03	.02	.05	.05	.22	.07	.05	.02	.04	.01	.04	.02	1.00								
-.04	.01	.01	.04	.23	-.09	-.02	.08	-.12	-.04	-.07	-.13	-.09	.00	.01	.03	-.07	-.08	-.13	.08	1.00								
-.02	.01	-.04	.04	.20	-.14	-.01	.05	-.09	-.08	-.07	-.10	-.04	.00	.08	-.07	.04	.06	-.10	-.04	.07	1.00							
.01	.07	-.03	.05	.15	-.05	-.01	.04	.02	.07	-.02	-.08	-.04	-.09	-.07	-.05	-.05	-.03	-.08	-.05	.09	.01	1.00						
.00	.01	-.02	.00	.04	-.08	.02	.04	-.02	.03	.07	.03	.04	-.05	.02	.04	-.04	.04	-.04	.04	.01	.01	.01	1.00					
.02	-.03	-.02	.07	.04	-.08	.02	.04	-.02	.03	.07	.03	.04	-.05	.02	.04	-.04	.04	-.04	.04	.01	.01	.01	.01	1.00				
-.03	-.04	.00	.00	.04	-.10	.10	-.14	-.09	-.08	-.05	-.05	-.05	-.08	.05	.06	-.03	-.04	-.07	.05	.04	.04	.04	.04	1.00				
.00	-.01	.02	.04	-.05	.04	.02	.04	.02	.05	.00	.02	.01	.06	.02	.04	-.03	.02	.01	.03	.00	.02	.02	.02	.02	1.00			
.02	.02	.02	.02	-.09	.14	-.09	.01	.18	.04	.05	.02	.00	.02	.06	.00	.03	.03	.00	.02	.16	.04	.03	.03	.03	.03	1.00		
.05	-.05	.09	.06	-.04	.06	-.04	.01	.06	.02	.01	.04	.00	.02	.03	.00	.02	.01	.02	.02	.02	.02	.02	.02	.02	.02	.02	1.00	
.00	.03	-.05	-.07	.03	-.10	.09	.01	.13	-.05	-.10	.05	-.02	-.10	.05	-.04	-.07	-.01	-.06	.04	.08	.03	.03	.03	.03	.03	.03	.03	1.00
-.01	.01	-.06	.00	.05	-.14	.06	.02	.02	.17	-.05	-.02	.02	-.07	.07	.04	-.07	.01	-.03	.02	.02	.02	.02	.02	.02	.02	.02	.02	1.00
.14	.03	.01	.01	.10	-.07	.02	.01	.09	.02	.01	.03	.02	.03	.01	.01	.03	.02	.01	.02	.02	.02	.02	.02	.02	.02	.02	.02	1.00
-.02	-.02	.06	.03	-.04	.04	.00	.16	.06	-.02	.06	.04	.04	.01	.02	.01	.04	.02	.01	.02	.02	.02	.02	.02	.02	.02	.02	.02	1.00
.22	-.24	.14	.44	.01	-.27	.33	-.10	-.20	-.21	.00	.12	.10	-.13	.01	-.10	-.09	.06	.03	.00	.08	.04	.05	.01	.01	.01	.01	.01	1.00
.39	-.13	.12	.07	.03	-.04	.03	.06	.00	-.07	.00	.00	.01	.02	.00	.02	.00	.05	.01	.01	.00	.03	.02	.01	.02	.02	.02	.02	1.00
-.07	.02	-.06	.02	.06	.00	.00	.18	.04	-.08	.03	.03	.01	.04	.06	.01	.01	.02	.02	.03	.01	.01	.01	.01	.01	.01	.01	.01	1.00
.04	-.07	.07	.01	-.22	-.03	.05	-.20	.04	-.07	-.03	.14	.02	-.09	-.07	-.09	-.07	.03	.00	.05	.14	.03	.03	.03	.03	.03	.03	.03	1.00
.05	-.03	.07	.06	-.19	.09	.00	.01	.07	.04	.01	.04	.04	-.03	-.06	.01	.03	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	1.00
.00	.02	.05	.02	-.17	.03	.03	.00	.05	.00	.54	.02	.06	-.04	.07	.05	.05	.05	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	1.00
.10	-.13	.08	.22	.10	-.30	.22	.14	-.18	-.21	.01	.05	.08	-.04	.07	.05	.03	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	1.00
-.11	-.07	.03	.21	-.20	.53	-.31	-.09	.30	.50	.01	.04	-.03	.13	-.09	.10	.05	.12	.12	.02	.05	.00	.00	.00	.00	.00	.00	.00	1.00
.00	.02	.11	.31	-.09	.18	-.06	.00	.08	.18	.10	.03	.02	.11	.02	.05	.03	.02	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	1.00
-.02	-.10	.11	.27	-.05	.16	-.11	.30	.18	.03	.06	.01	.03	.11	.04	.02	.06	.04	.01	.01	.02	.02	.02	.02	.02	.02	.02	.02	1.00
-.05	-.13	.11	.37	-.09	.21	-.10	.00	.04	.32	.01	.09	.01	.10	-.02	.14	.16	.10	.14	.02	.09	.03	.03	.03	.03	.03	.03	.03	1.00
-.02	-.07	.02	.19	-.08	.14	-.06	-.03	.02	.17	.01	.03	.00	-.02	.03	.06	.08	.01	.08	.04	.03	.03	.03	.03	.03	.03	.03	.03	1.00
-.20	-.05	-.01	.10	.02	.28	-.27	-.10	.06	.40	-.03	-.08	-.07	.12	-.01	.19	.12	.13	.00	.02	.00	.02	.02	.02	.02	.02	.02	.02	1.00

APPENDIX C  
Continued

	u24	u25	u26	u27	u28	c1	c2	c3	c4	c5	c6	c7	c8	p1	p2	p3	p4	p5	p6	p7	p8	p9	p10	p11
CITE	.01	.00	.02	-.03	.00	.02	.05	.00	-.01	.14	-.02	.22	.39	-.07	.04	.05	.00	.10	-.11	-.00	-.02	-.05	-.02	-.20
u1	<b>.07</b>	.01	-.03	-.04	-.01	.02	-.05	.03	-.01	.03	-.02	-.24	-.13	.02	-.07	-.03	-.02	-.13	-.07	-.11	-.10	-.13	-.07	-.05
u2	-.03	-.02	-.02	.00	.02	<b>.09</b>	<b>.09</b>	-.05	-.06	.01	<b>.06</b>	.14	.12	-.06	<b>.07</b>	<b>.07</b>	<b>.05</b>	<b>.08</b>	.03	.11	.01	.11	.02	-.01
u3	-.05	.00	<b>.07</b>	.00	.04	-.02	<b>.06</b>	-.07	.00	.01	.03	.44	<b>.07</b>	.02	.01	<b>.06</b>	.02	.22	.22	.31	<b>.27</b>	<b>.37</b>	<b>.19</b>	.10
u4	<b>.15</b>	<b>.16</b>	-.04	-.05	-.04	-.14	<b>.06</b>	-.10	-.05	<b>.10</b>	-.04	.01	-.03	<b>.06</b>	-.22	-.19	-.17	.10	-.20	-.09	-.05	-.09	-.08	.02
u5	-.05	-.01	-.08	-.10	.04	-.04	<b>.06</b>	-.04	-.06	-.07	.04	-.27	-.04	.00	-.03	-.03	.03	.30	.53	.18	.16	.21	.14	.28
u6	-.01	.04	.04	.10	.02	-.09	-.04	.09	.06	.02	.00	.33	.03	.00	.05	.00	.03	.22	-.31	-.06	-.11	-.10	-.06	-.27
u7	-.05	.04	.04	-.14	-.04	-.02	.01	.01	-.07	-.01	.16	-.10	.06	.18	-.20	-.01	.00	.14	-.09	.00	.30	.00	.00	-.10
u8	.03	-.02	-.02	-.09	-.02	<b>.18</b>	<b>.06</b>	.02	-.13	-.09	.06	-.20	-.00	.04	.04	.07	.05	-.18	.30	.08	.18	.04	.02	.06
u9	-.07	.01	-.03	-.08	.05	.04	.02	-.17	-.05	.02	.06	-.21	-.07	-.08	-.07	.04	.00	-.21	.50	.18	.03	.32	.17	.40
u10	-.02	-.07	<b>.07</b>	-.05	.00	<b>.05</b>	.01	.05	-.10	-.01	.06	.00	.00	.03	-.03	.01	.54	.01	.01	.10	.06	.01	.01	-.03
u11	-.08	-.10	-.03	-.05	.02	-.03	.04	-.02	.05	-.03	.04	.12	.00	.03	.14	.04	.02	.05	.04	-.03	.01	.09	.03	-.08
u12	-.04	-.04	.04	-.05	-.01	.00	.00	-.02	.03	-.02	.04	.10	.00	-.01	.02	-.04	-.06	.08	-.03	-.02	.03	.01	.00	-.07
u13	-.09	-.07	-.05	-.08	-.06	.02	.02	-.10	-.07	.03	-.01	-.13	-.02	.04	-.09	-.03	-.04	-.05	.13	.01	.11	.10	-.02	-.12
u14	-.07	-.09	-.02	-.05	-.02	-.06	-.03	.05	.07	-.01	-.02	.01	.00	.06	-.07	-.06	-.07	.05	-.09	.02	-.04	-.02	-.03	-.01
u15	-.05	-.03	-.04	-.06	.04	.00	.00	-.05	-.04	-.01	-.01	-.10	-.02	-.01	-.09	.01	-.05	-.03	.03	.05	.02	-.14	.06	-.19
u16	-.05	-.03	-.04	-.03	-.03	.03	.02	-.08	-.07	.03	.04	-.09	.00	-.01	-.07	-.03	-.04	.02	.05	.03	.06	.14	.08	.12
u17	-.03	-.04	-.04	-.04	.02	-.03	-.01	-.02	-.04	-.04	.02	-.06	-.05	.02	-.03	.00	-.05	-.04	.12	.02	.04	.10	.01	-.13
u18	-.08	-.08	-.04	-.07	-.01	.00	-.02	-.06	-.03	.02	-.01	.03	-.01	-.02	.07	<b>.29</b>	<b>.08</b>	.04	.12	.04	.01	.14	.08	.00
u19	-.05	-.05	-.04	-.05	-.03	-.02	.02	.04	-.02	.02	.02	.00	-.02	-.03	-.03	.05	-.04	.02	.02	.01	.01	-.02	.04	-.02
u20	-.09	-.06	.01	-.04	-.04	<b>.16</b>	.02	<b>.08</b>	-.03	-.04	-.02	-.08	-.03	.01	.14	.07	-.01	-.17	.05	.01	.02	-.09	-.03	.00
u21	-.01	-.04	.01	-.04	<b>.05</b>	-.04	<b>.04</b>	.08	.03	-.02	.04	.04	.02	.01	-.03	.05	-.02	.02	.00	.00	.00	-.03	.03	-.02
u22	-.08	-.04	-.05	-.07	-.03	.05	-.04	-.07	-.01	.02	-.03	.05	.01	.02	-.10	-.07	-.03	<b>.08</b>	-.08	.00	-.07	-.06	-.02	-.01
u23	-.06	-.04	.00	-.06	-.04	.00	.01	.02	.04	.01	-.02	-.01	.01	.00	-.08	-.06	-.07	.04	-.11	-.06	-.03	-.05	-.03	-.05
u24	1.00	-.07	.01	-.19	-.03	-.02	.00	.06	.05	.00	-.04	.03	.01	-.03	-.07	-.04	-.04	-.05	-.08	-.06	-.04	-.04	-.03	.01
u25	-.07	1.00	-.01	-.04	.00	-.05	-.03	-.01	.04	.05	-.04	.02	.05	.00	-.07	-.07	-.04	-.06	-.02	-.01	.00	-.02	.01	.11
u26	.01	-.01	1.00	-.02	-.02	.01	.00	.01	.01	-.03	.04	.10	.06	<b>.05</b>	.02	.07	.03	.04	-.06	.02	-.02	-.01	-.02	-.10
u27	-.19	-.04	-.02	1.00	-.03	-.07	-.00	.07	.09	-.02	-.08	.14	.01	-.04	.10	-.04	-.04	-.01	-.11	-.08	-.12	-.07	-.03	-.04
u28	-.03	.00	-.02	-.03	1.00	.03	.00	-.04	-.02	.00	.04	.00	-.04	.02	.02	.03	.05	-.02	.00	.06	-.02	.02	.01	.00
c1	-.02	-.05	.01	-.07	.03	1.00	<b>.44</b>	-.17	-.52	.04	<b>.38</b>	-.03	.06	.02	.05	.05	<b>.06</b>	.02	.10	.01	.08	.04	-.01	.00
c2	.00	-.03	-.00	-.00	.00	<b>.44</b>	1.00	-.14	-.37	<b>.05</b>	<b>.20</b>	.03	.06	-.03	.01	.01	.02	.06	.06	.00	.06	.07	.00	.00
c3	<b>.06</b>	-.01	.01	.07	-.04	-.17	-.14	1.00	<b>.22</b>	-.24	.12	.11	-.05	.12	.02	-.01	-.04	.04	-.12	-.02	-.04	-.17	-.02	-.16
c4	<b>.05</b>	.04	.01	<b>.09</b>	-.02	-.52	-.37	<b>.22</b>	1.00	-.13	-.27	<b>.08</b>	-.09	-.03	-.02	-.04	-.09	-.04	-.12	-.07	-.11	-.05	-.01	.01
c5	.00	.05	-.03	-.02	.00	<b>.04</b>	<b>.05</b>	-.24	-.13	1.00	-.09	.13	1.00	-.04	.06	.01	.04	.52	-.22	.01	-.06	.00	-.04	-.39
c6	-.04	-.04	.04	-.08	.04	<b>.38</b>	<b>.20</b>	<b>.12</b>	-.27	-.09	1.00	.01	.08	.08	-.03	.04	.04	.06	.05	.02	.17	.01	.00	-.08
c7	.03	-.02	<b>.10</b>	-.14	.00	-.03	<b>.03</b>	.11	.08	.11	.08	1.00	.13	.04	.15	.05	.04	.52	-.22	.04	-.07	.00	-.04	-.39
c8	.01	<b>.05</b>	<b>.06</b>	-.04	.00	-.02	<b>.06</b>	-.05	-.09	.11	.08	.13	1.00	-.02	.02	.00	.00	.06	-.02	.01	.08	.01	.00	-.08
p1	-.03	.00	<b>.05</b>	-.04	.02	-.02	<b>.03</b>	-.12	-.03	-.04	-.03	.15	.02	1.00	.00	.00	.07	.05	-.02	.05	.08	.01	.01	-.10
p2	-.07	-.07	.02	<b>.10</b>	.02	.05	.01	.02	-.02	-.06	-.03	.15	.02	.00	1.00	-.06	.02	.06	-.02	-.02	-.05	-.03	-.02	-.14
p3	-.04	-.04	-.03	-.04	.03	.05	.01	.04	-.09	-.01	.04	.04	.00	.05	-.06	1.00	.06	-.03	.11	.05	.06	.07	.01	-.06
p4	-.04	-.04	.03	-.04	.05	.06	.02	.04	-.09	-.02	.04	.04	.00	.07	.02	.06	1.00	.00	-.02	-.08	.04	.01	.04	-.02
p5	-.05	-.06	.04	-.01	-.02	.06	.02	.06	-.04	-.01	.06	.52	.06	.04	.06	.03	.00	1.00	.02	-.02	.02	.00	-.02	-.41
p6	-.08	-.02	-.06	-.11	.00	<b>.10</b>	<b>.06</b>	-.12	-.12	-.02	.05	-.22	-.02	-.02	-.02	.11	-.02	-.22	1.00	<b>.20</b>	.17	<b>.34</b>	<b>.13</b>	<b>.33</b>
p7	-.04	.00	-.02	-.08	<b>.06</b>	.01	.00	-.02	-.07	-.01	.02	-.04	.01	.05	-.02	.05	.08	-.06	.20	1.00	.02	.14	.12	.17
p8	-.04	.00	-.02	-.12	-.02	<b>.08</b>	<b>.06</b>	-.04	-.11	-.06	.17	-.07	.02	<b>.08</b>	-.05	.06	.04	.02	.17	.02	1.00	.17	.04	.02
p9	-.04	-.02	-.01	-.07	.02	<b>.04</b>	<b>.07</b>	-.17	-.05	.02	.01	.00	.01	-.04	-.03	.07	.00	.04	.34	.14	1.00	.17	.04	.02
p10	-.03	.01	-.02	-.03	.01	-.01	.00	-.04	-.01	.02	.00	-.04	.01	-.05	-.02	.01	.04	-.02	.13	.12	.04	.18	1.00	.13
p11	.01	.11	-.10	-.04	.05	.00	.00	-.16	.01	.00	-.08	-.39	-.10	-.13	-.14	-.06	-.02	-.41	.33	.17	.02	.21	.13	1.00

Notes: Bold correlations are significant at  $p < .05$  (two-sided tests).

## REFERENCES

- Alba, Joseph, John Lynch, Barton Weitz, Chris Janiszewski, Richard Lutz, Alan Sawyer, and Stacy Wood (1997), "Interactive Home Shopping: Consumer, Retailer, and Manufacturer Incentives to Participate in Electronic Marketplaces," *Journal of Marketing*, 61 (July), 38–53.
- Anderson, James C. and James A. Narus (1990), "A Model of Distributor Firm and Manufacturer Firm Working Partnerships," *Journal of Marketing*, 54 (January), 42–58.
- Armstrong, J.S. (1980), "Unintelligible Management Research and Academic Prestige," *Interfaces*, 10 (2), 80–86.
- Ayres, Ian and Frederick E. Vars (2000), "Determinants of Citations to Articles in Elite Law Reviews," *Journal of Legal Studies*, 29 (1), 427–50.
- Baldi, Stephane (1998), "Normative Versus Social Constructivist Processes in the Allocation of Citations: A Network-Analytic Model," *American Sociological Review*, 63 (6), 829–46.
- Bauerly, Ronald J., Don T. Johnson, and Mandeep Singh (2005), "Readability and the Impact of Marketing," in "Marketing Renaissance: Opportunities and Imperatives for Improving Marketing Thought, Practice, and Infrastructure," *Journal of Marketing*, 69 (October), 19–20.
- Baumgartner, Hans and Rik Pieters (2003), "The Structural Influence of Marketing Journals: A Citation Analysis of the Discipline and Its Subareas over Time," *Journal of Marketing*, 67 (April), 123–39.
- Bayer, Alan E. (1982), "A Bibliometric Analysis of Marriage and Family Literature," *Journal of Marriage and the Family*, 44 (3), 527–38.
- Bergh, Donald D., John Perry, and Ralph Hanke (2006), "Some Predictors of *SMJ* Article Impact," *Strategic Management Journal*, 27 (1), 81–100.
- Bettencourt, Lance A. and Mark B. Houston (2001a), "The Impact of Article Method Type and Subject Area on Article Citations and Reference Diversity in *JM*, *JMR*, and *JCR*," *Marketing Letters*, 12 (4), 327–40.
- and ——— (2001b), "Reference Diversity in *JCR*, *JM*, and *JMR*: A Reexamination and Extension of Tellis, Chandy, and Ackerman," *Journal of Consumer Research*, 28 (September), 313–23.
- Bettman, James R., Mary Frances Luce, and John W. Payne (1998), "Constructive Consumer Choice Processes," *Journal of Consumer Research*, 25 (3), 187–217.
- Bitner, Mary J. (1990), "Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses," *Journal of Marketing*, 54 (April), 69–82.
- Bolton, Ruth N. (2003), "From the Editor," *Journal of Marketing*, 67 (January), 1–3.
- Cameron, A. Colin and Pravin K. Trivedi (1990), "Regression-Based Tests for Overdispersion in the Poisson Model," *Journal of Econometrics*, 46 (3), 347–64.
- Cialdini, Robert B. (1988), *Influence: Science and Practice*. Glenview, IL: Scott Foresman and Company.
- Cote, Joseph A., Siew Meng Leong, and Jane Cote (1991), "Assessing the Influence of *Journal of Consumer Research*: A Citation Analysis," *Journal of Consumer Research*, 18 (3), 402–410.
- Cronin, Joseph J. and Steven A. Taylor (1992), "Measuring Service Quality: A Reexamination and Extension," *Journal of Marketing*, 56 (July), 55–68.
- Day, George S. (1994), "The Capabilities of Market-Driven Organizations," *Journal of Marketing*, 58 (October), 37–52.
- Doney, Patricia M. and Joseph P. Cannon (1997), "An Examination of the Nature of Trust in Buyer–Seller Relationships," *Journal of Marketing*, 61 (April), 35–51.
- Flesch, R. (1948), "A New Readability Yardstick," *Journal of Applied Psychology*, 32 (3), 221–33.
- Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (4), 343–73.
- Ganesan, Shankar (1994), "Determinants of Long-Term Orientation in Buyer–Seller Relationships," *Journal of Marketing*, 58 (July), 1–19.
- Garbarino, Ellen and Mark S. Johnson (1999), "The Different Roles of Satisfaction, Trust, and Commitment in Customer Relationships," *Journal of Marketing*, 63 (July), 70–87.
- Gilbert, Nigel G. (1977), "Referencing as Persuasion," *Social Studies of Science*, 7 (1), 112–22.
- Goldenberg, Jacob, Barak Libai, and Eitan Muller (2005), "An Ego-Centered Analysis of Large-Scale Networks: The Case of the Marketing Discipline," working paper, School of Management, Tel Aviv University.
- Hoffman, Donna L. and Morris B. Holbrook (1993), "The Intellectual Structure of Consumer Research: A Bibliometric Study of Author Cocitations in the First 15 Years of the *Journal of Consumer Research*," *Journal of Consumer Research*, 19 (4), 505–517.
- and Thomas P. Novak (1996), "Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations," *Journal of Marketing*, 60 (July), 50–68.
- Houston, Franklin S. and Julie B. Gassenheimer (1987), "Marketing and Exchange," *Journal of Marketing*, 51 (October), 3–18.
- Jacobs, Richard S., Kenneth R. Evans, Robert E. Kleine III, and Timothy D. Landry (2001), "Disclosure and Its Reciprocity as Predictors of Key Outcomes of an Initial Sales Encounter," *Journal of Personal Selling & Sales Management*, 21 (1), 51–61.
- Jaworski, Bernard J. and Ajay K. Kohli (1993), "Market Orientation: Antecedents and Consequences," *Journal of Marketing*, 57 (July), 53–70.
- Kassarjian, Harold (1977), "Content Analysis in Consumer Research," *Journal of Consumer Research*, 4 (June), 8–18.
- Kerin, Roger A. (1996), "In Pursuit of an Ideal: The Editorial and Literary History of the *Journal of Marketing*," *Journal of Marketing*, 60 (January), 1–13.
- King, J. (1987), "A Review of Bibliometric and Other Science Indicators and Their Role in Research Evaluation," *Journal of Information Science*, 13 (5), 261–76.
- Kohli, Ajay K. and Bernard J. Jaworski (1990), "Market Orientation: The Construct, Research Propositions, and Managerial Implications," *Journal of Marketing*, 54 (July), 1–18.
- Landes, William M. and Richard A. Posner (1996), "Heavily Cited Articles in Law," *Chicago Kent Law Review*, 71 (3), 825–40.
- Leong, Siew Meng (1989), "A Citation Analysis of the *Journal of Consumer Research*," *Journal of Consumer Research*, 15 (4), 492–97.
- Lynch, John G. and Dan Ariely (2000), "Wine Online: Search Costs Affect Competition on Price, Quality, and Distribution," *Marketing Science*, 19 (1), 83–103.
- McAlister, Leigh (2005), "Unleashing Potential," in "Marketing Renaissance: Opportunities and Imperatives for Improving Marketing Thought, Practice, and Infrastructure," *Journal of Marketing*, 69 (October), 16–17.
- Merton, Robert K. (1968), "The Matthew Effect in Science," *Science*, 159 (3810), 56–63.
- Metoyer-Duran, Cheryl (1993), "The Readability of Published, Accepted, and Rejected Papers Appearing in College and Research Libraries," *College and Research Libraries*, 64 (November), 517–26.

- Mick, D.G. (2005), "Inklings: From Mind to Page in Consumer Research," *Association for Consumer Research Newsletter*, (Summer), 1–3.
- Muniz, Albert M. and Thomas C. O'Guinn (2001), "Brand Community," *Journal of Consumer Research*, 27 (4), 412–32.
- Narver, John C. and Stanley F. Slater (1990), "The Effect of a Market Orientation on Business Profitability," *Journal of Marketing*, 54 (October), 20–35.
- Novak, Thomas P., Donna L. Hoffman, and Y.F. Yung (2000), "Measuring the Customer Experience in Online Environments: A Structural Modeling Approach," *Marketing Science*, 19 (1), 22–42.
- Peters, H.P.F. and Anthony F.J. van Raan (1994), "On Determinants of Citation Scores: A Case Study in Chemical Engineering," *Journal of the American Society for Information Science*, 45 (1), 39–49.
- Pieters, Rik and Hans Baumgartner (2002), "Who Talks to Whom? Intra- and Interdisciplinary Communication of Economics Journals," *Journal of Economic Literature*, 40 (2), 483–509.
- , ———, Jeroen Vermunt, and Tammo Bijmolt (1999), "Importance and Similarity in the Evolving Citation Network of the *International Journal of Research in Marketing*," *International Journal of Research in Marketing*, 16 (2), 113–27.
- Slater, Stanley F. and John C. Narver (1995), "Market Orientation and the Learning Organization," *Journal of Marketing*, 59 (July), 63–74.
- Smart, Scott and Joel Waldfogel (1996), "A Citation-Based Test for Discrimination at Economics and Finance Journals," National Bureau of Economic Research Working Paper No. 5460, Cambridge, MA.
- Staelin, Richard (2002), "A Prior Editor's Guidelines on Readability," (accessed December 20, 2005), [available at [http://bear.cba.ufl.edu/centers/MKS/author\\_information/readability.pdf](http://bear.cba.ufl.edu/centers/MKS/author_information/readability.pdf)].
- Sternberg, Robert J. and Tamara Gordeeva (1996), "The Anatomy of Impact: What Makes an Article Influential?" *Psychological Science*, 7 (2), 69–75.
- Stewart, John A. (1983), "Achievement and Ascriptive Processes in the Recognition of Scientific Articles," *Social Forces*, 62 (1), 166–89.
- Stremersch, Stefan and Peter C. Verhoef (2005), "Globalization of Authorship in the Marketing Discipline: Does It Help or Hinder the Field?" *Marketing Science*, 24 (4), 585–94.
- Tellis, Gerard J., Rajesh K. Chandy, and David S. Ackerman (1999), "In Search of Diversity: The Record of Major Marketing Journals," *Journal of Marketing Research*, 36 (February), 120–31.
- Van Dalen, Hendrik P. and Kène Henkens (2001), "What Makes a Scientific Article Influential? The Case of Demographers," *Scientometrics*, 50 (3), 455–82.
- and ——— (2004), "Signals in Science: On the Importance of Signaling in Gaining Attention in Science," Tinbergen discussion paper, Erasmus University Rotterdam.
- and Arjo Klamer (2005), "Is There Such a Thing Called Scientific Waste?" Tinbergen discussion paper, Erasmus University Rotterdam.
- Vargo, Stephen L. and Robert F. Lusch (2004), "Evolving to a New Dominant Logic for Marketing," *Journal of Marketing*, 68 (January), 1–17.
- Webster, Frederick E. (1992), "The Changing Role of Marketing in the Corporation," *Journal of Marketing*, 56 (October), 1–17.
- Yitzhaki, Moshe (2002), "Relation of the Title Length of a Journal Article to the Length of the Article," *Scientometrics*, 54 (3), 435–47.
- Zeithaml, Valerie A., Leonard L. Berry, and A. Parasuraman (1996), "The Behavioral Consequences of Service Quality," *Journal of Marketing*, 60 (April), 31–46.
- Zinkhan, George M., Martin S. Roth, and Mary Jane Saxton (1992), "Knowledge Development and Scientific Status in Consumer-Behavior Research: A Social-Exchange Perspective," *Journal of Consumer Research*, 19 (2), 282–91.

Copyright of *Journal of Marketing* is the property of American Marketing Association and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.