

What Does It Take to Get Promoted in Marketing Academia? Understanding Exceptional Publication Productivity in the Leading Marketing Journals

Institutional competition to retain and recruit marketing scholars capable of publishing in the leading marketing journals has intensified. Although increased emphasis has been placed on publication productivity in the leading marketing journals, little is known about questions such as (1) What level of publication productivity in the leading marketing journals does it take to get promoted in marketing academia? (2) What level of publication productivity in the leading marketing journals warrants exception? and (3) What drives research productivity in the leading marketing journals? The authors draw on the economic concept of imperfect substitution to address these questions using two data sets: (1) a census of publication activity in the leading marketing journals of 337 scholars in the top 70 institutions who were promoted between 1992 and 2006 and (2) an examination of 2672 scholars who published 3492 articles in the four leading marketing journals over the 1982–2006 period. The results indicate that the average number of publications by successful candidates for promotion to associate professor from PhD conferral at the top 10 institutions was .57 articles in the leading marketing journals per year, compared with .47 in the top 11–20 institutions, .47 in the top 21–40 institutions, and .26 in the top 41–70 institutions. The authors also present findings related to promotion to full professor both from PhD conferral and from promotion to associate professor, as well as scholars identified as warranting exceptional publication productivity. The findings provide substantive implications for marketing academics, for those involved with the recruitment and retention of marketing academics, and for the field of marketing thought in general.

Keywords: marketing academia, scientometrics, imperfect substitution, publication productivity, career advancement

Promotion in academia is an institutional governance mechanism employed to retain, at the junior level, and recruit, at the senior level, marketing scholars.¹ Because the development of the science and practice of marketing is driven by publications within the field's leading journals (i.e., *Journal of Marketing* [JM], *Journal of*

¹In this study, promotion refers to a promotion from assistant professor to associate professor and from associate professor to full professor.

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Marketing Research [JMR], *Journal of Consumer Research* [JCR], and *Marketing Science* [MKS]), institutions (i.e., marketing departments) work to retain and recruit scholars capable of publication in these journals. However, although publication productivity in the leading marketing journals is an important element in promotion decisions (McAlister 2005), there is a lack of data on this topic. Without data on publication productivity, how can a faculty member's record for promotion be evaluated to determine whether he or she has achieved a level of productivity in the leading marketing journals that sets him or her apart from others in the market? Although this issue is pertinent to assistant and associate professors in the field, the influx of funding for the recruitment of senior scholars through endowed chairs has raised the issue of what level of productivity allows more senior faculty members to stand out among their peers. Without a clear understanding of what exceptional productivity is, it is not possible to assess current and potential faculty or how publication productivity leads to career advancement.

Given these issues, this study works to examine three research questions: (1) What level of publication productiv-

ity in the leading marketing journals does it take to get promoted in marketing academia? (2) What level of publication productivity in the leading marketing journals warrants exception? and (3) What drives research productivity in the leading marketing journals? To examine these questions, this study draws on the economic concept of imperfect substitution and builds on research within scientometrics (i.e., the measurement and analysis of science) on the drivers of research productivity (e.g., Gupta, Kumar, and Aggarwal 1999; Nwagwu 2006; Prpic 1996). We empirically examine the research questions using two data sets: (1) a census of publication activity in the leading marketing journals of 337 scholars in the top 70 institutions promoted between 1992 and 2006 and (2) an examination of 2672 scholars who collectively published 3492 articles in the four leading marketing journals during the 1982–2006 period. The findings provide implications for marketing academics and for those involved with the recruitment and retention of marketing academics.

Background Literature

Rankings incorporating research productivity (e.g., *Financial Times* business school rankings, Trieschmann et al. 2000) have received increased attention as competition among business schools to attract quality faculty and students, endowments, and so forth, has intensified. In the field of marketing, this is exemplified by an increased interest in quantifying contributions of marketing scholarship (e.g., Bakir, Vitell, and Rose 2000; Baumgartner and Pieters 2003; Cheng, Chan, and Chan 2003; Mittal, Feick, and Murshed 2008; Stremersch and Verhoef 2005; Stremersch, Verniers, and Verhoef 2007; Tellis, Chandy, and Ackerman 1999). The issue of quantifying contributions is most observable in promotion decisions.²

Although promotion decisions weigh many aspects of a faculty member's academic portfolio (Bartels 1983; Beltramini, Schlacter, and Kelley 1985), a central criterion at research institutions is publication productivity in the leading marketing journals (McAlister 2005). Promotion decisions not only are about rewarding past publication success but also include attempts by an institution to retain talent to maintain and build competitive positioning. By granting a promotion, an institution works to increase the switching costs of its marketing faculty (e.g., granting a promotion to an associate professor binds the person to the institution because rank and tenure are not always portable, and the psychic costs of giving up rank or tenure are substantial).

Underlying the promotion decision is the economic concept of imperfect substitution—that is, when lesser talent is a poor substitute for greater talent (Murphy, Shleifer, and Vishny 1991; Rosen 1981). Imperfect substitution occurs when two products are perceived as being different in relation to a set of desired qualities and therefore have different

²Here, promotion decisions are not conceptually restricted to internal institutional aspects; they are also considered external to the institution. For example, scholars are often recruited from one institution to another by means of promotion from a lower rank to a higher rank (e.g., associate professor to full professor).

demand curves in a specific market (Rosen 1981). For example, it could be argued that at a top 10 institution, an assistant professor who has published one article in the leading marketing journals is a poor substitute for another assistant professor, current or future, who has published five articles in the same journals. Rosen (1981) argues that imperfect substitution conditions an assignment problem between buyers and sellers, contending that the greater the skew in talent distribution within a market, the larger is the skew in the distribution of rewards.³

Within the field of marketing, the assignment problem associated with imperfect substitution, and its relationship to limited talent within the market, is most clearly observable in the promotion rates from assistant professor to associate professor. Specifically, research institutions recruit newly minted PhDs on the basis of perceived talent (i.e., the scholar is capable of publishing in the leading marketing journals). Those who are capable of successfully publishing to a set level of institutional expectations in the leading marketing journals are promoted from assistant professor to associate professor. Those who do not meet expectations are released, and the market reassigns them to another institution. When an assignment problem has occurred, the institution reenters the market and works to attract a more qualified substitute. Notably, although the retention of junior marketing faculty developing into highly productive publishers in the leading marketing journals is central to enhancing an institution's competitive positioning (see Siemens et al. 2005), limited data exist to assist marketing faculty with assessing the assignment decision. As such, we explore the question of what level of publication productivity in the leading marketing journals it takes to get promoted.

Furthermore, we explore the assignment problem associated with imperfect substitution and its relationship to limited talent within the broader market. Specifically, the increased competitive environment for marketing faculty has stimulated the development of a large number of endowed positions. Typically, endowed positions are reserved to attract and retain faculty members, who, through their past and expected future publications in the leading marketing journals, assist the institution in enhancing its competitive positioning. However, the employment of endowed chairs within the governance structure of promotion necessitates a clear understanding of the level of productivity in the leading marketing journals that warrants distinction (i.e., identification of exceptionally prolific scholars). As such, in this study, we also explore the issue of what level of publication in the leading marketing journals warrants exception.

Finally, it is important to examine drivers of publication productivity in the leading marketing journals. A stream of

³The perspective of a skewed talent distribution, as conceptualized by Rosen (1981), can be argued to be consistent with the talent distribution in the field of marketing, in which (1) most marketing academics publish very few articles overall when considering the broad range of journals (see Powers et al. 1998) and (2) academics receive different financial rewards by publishing in different outlets, as Mittal, Feick, and Murshed (2008) note.

scientometric investigation focuses on research productivity (e.g., Gupta, Kumar, and Aggarwal 1999; Long et al. 1998; Nwagwu 2006; Prpic 1996). This line of scientometric inquiry is consistent with Rosen's (1981) emphasis on imperfect substitution. Thus, building on this literature, we examine academic training and gender as potential drivers of publication productivity in the leading marketing journals.

Method

Journal Selection

The leading journals in marketing are *JM*, *JMR*, *JCR*, and *MKS* (Lehmann 2005; McAlister 2005; Stremersch, Verniers, and Verhoef 2007). The identification of these journals as the leading journals in the field of marketing is consistent with Theoharakis and Hirst's (2002) findings and Tellis, Chandy, and Ackerman's (1999) and Mittal, Feick, and Murshed's (2008) applications of the leading marketing journals. Furthermore, the journals selected are consistent with the focus of this study. For example, McAlister (2005) notes that tenure and promotion decisions are directly related to publication in a common set of leading marketing journals and that these journals are an exclusive set consisting of *JM*, *JMR*, *JCR*, and *MKS*.

Data Set for Research Question 1: What Level of Publication Productivity in the Leading Marketing Journals Does It Take to Get Promoted in Marketing Academia?

To examine the question of what it takes to get promoted in marketing academia, we generated a census of the publication activity in the four leading marketing journals of 337 scholars promoted to associate professor and/or full professor in the top 70 institutions from 1992 to 2006. We selected this period (1) to be consistent with prior research that has examined productivity among marketing faculty (e.g., Powers et al. 1998) and (2) to reflect recent promotion decisions, thus reflecting the contemporary academic context.

Next, given the nature of the assignment problem regarding imperfect substitution, we deemed it important to segment institutions because institutions of different academic levels were predicted to have different publication expectations for promotion decisions. Trieschmann and colleagues (2000) provide a ranking of marketing departments based on research productivity in three of the four leading marketing journals (i.e., *JM*, *JMR*, and *JCR*). We employed Trieschmann and colleagues' ranking for the top 70 marketing departments and segmented institutions into (1) top 10, (2) top 11–20, (3) top 21–40, and (4) top 41–70.⁴

We sourced marketing faculty publication and promotion data through multiple avenues. We searched departmental Web sites at each of the identified institutions and secured current curriculum vitae of faculty when possible. When curriculum vitae were not available online, we

⁴We contacted Trieschmann and colleagues (2000) to obtain the ranking for the top 70 institutions because their article presents information only for the top 50 institutions.

sourced publication records through ABI/INFORM and journal tables of contents, among other sources. When specific promotional dates were unclear, we contacted institutions and individuals directly and, in some cases, made requests for promotion information under the Freedom of Information Act.⁵

We calculated the number of publications per year from PhD conferral to promotion to associate professor, from PhD conferral to promotion to full professor (when applicable), and from promotion to associate professor to promotion to full professor (when applicable) for each scholar. In total, the data set for Research Question 1 consisted of 337 unique marketing faculty segmented by institution: top 10 (N = 75), top 11–20 (N = 64), top 21–40 (N = 93), and top 41–70 (N = 116).⁶

Data Set for Research Question 2: What Level of Publication Productivity in the Leading Marketing Journals Warrants Exception?

To examine the question of what level of publication warrants exception, we assessed publication rate in the leading marketing journals. Following prior work on publication productivity (e.g., Inkpen and Beamish 1994), we restricted the sample to research articles published in the four leading marketing journals over the 1982–2006 period, excluding editorials, obituaries, and articles labeled as comments on other people's work. Although some of these excluded articles advance the field and represent contributions, we excluded them as a class to maintain consistency. The starting year coincided with the introduction of *MKS* into the field. We sourced the tables of contents of each journal for the 25-year period. We coded each article to identify the authors contributing to the work, thus providing an author appearance. Following Bakir, Vitell, and Rose (2000) and Inkpen and Beamish (1994), we then tabulated an "adjusted authorship appearance" score. Adjusted authorship appearance accounts for multiple author articles. For example, an author received a score of 1 for a single-authored work, and in a published article with two authors, each author received a score of .5; likewise, for an article with three authors, each author received a score of .333, and so on.

Next, we expanded the data set by sourcing the year each scholar was awarded his or her PhD and, when pertinent, the year of retirement or passing. We used this information to calculate how many years each scholar was active during the 25-year period.⁷ We assumed that the date of the awarding of the PhD was the midpoint of the year; for

⁵Despite our best efforts, we were not able to obtain the month of graduation or promotion in most cases. In general, the information was not available online, people could not remember, and so on. Therefore, we set awarding of the PhD to a standard date of June 1, reasoning that, in general, people graduate at the end of the spring semester. Furthermore, we set the date of promotion to September 1, reasoning that most promotions become effective at the beginning of the fall semester.

⁶Because some scholars changed institutions across and within tiers, in some cases, we counted scholars multiple times; therefore, the summation of the specific Ns per tier does not total to 337, but rather to 348.

⁷We define the "active" status as having received a PhD and not having retired or passed away.

example, if a scholar received his or her PhD in 1982 and did not retire or pass away before the end of 2006, we calculated him or her as active for 24.5 years (i.e., 24 years [1983–2006 inclusive] plus half a year in 1982). Likewise, if a scholar received his or her PhD in 1993 and did not retire or pass away before the end of 2006, we calculated him or her as active for 13.5 years (i.e., 13 years [1994–2006 inclusive] plus half a year in 1993). If a scholar received his or her PhD before 1982 and did not retire or pass away before the end of 2006, we calculated him or her as being active for the full 25 years. If a scholar retired or passed away before the end of the 25-year period, we factored this into the calculation of the active number of years. For example, if a scholar received his or her PhD before 1982 and retired in 1995, we took the end of 1995 as the end date of that scholar’s active period and calculated the number of years active as 14. The one exception to this process is if a scholar continued to publish articles in the four leading marketing journals after retirement/passing, in which case we took the end date of that scholar’s active period to be the date of the last publication.

Data Set for Research Question 3: What Drives Research Productivity in the Leading Marketing Journals?

To examine the drivers of research productivity in the leading marketing journals, we built on the data set of scholars used to examine Research Question 2. Building on prior work in the scientometric study of publication productivity, we sourced information for the scholars examined in Research Question 2 pertaining to (1) the tier of each scholar’s PhD-granting institution (e.g., Long et al. 1998) and (2) gender (see Prpic 2002).

Analysis and Results

Research Question 1: What Level of Publication Productivity in the Leading Marketing Journals Does It Take to Get Promoted in Marketing Academia?

Research Question 1 assesses the publication productivity in the leading marketing journals that is necessary for promotion from assistant professor to associate professor and from associate professor to full professor. We calculated descriptive statistics (see Table 1) on a per-year basis and as a normalized average (to account for differences in years to promotion across individuals and institutions) for conferral

of PhD to promotion to associate professor, from conferral of PhD to promotion to full professor, and from promotion to associate professor to promotion to full professor; we used a 6-year time frame for the normalization of conferral of PhD to promotion to associate professor and promotion to associate professor to promotion to full professor (i.e., average per year multiplied by 6) and a 12-year time frame for the normalization of conferral of PhD to promotion to full professor (i.e., average per year multiplied by 12).

The results indicate that from conferral of PhD to promotion to associate professor, successful promotion candidates in the top 10 institutions published an average of .57 articles in the leading marketing journals per year, compared with .47 in the top 11–20 institutions, .47 in the top 21–40 institutions, and .26 in the top 41–70 institutions. Furthermore, the results from conferral of PhD to promotion to full professor indicate that successful promotion candidates at the top 10 institutions published an average of .59 articles in the leading marketing journals per year, compared with .48 in the top 11–20 institutions, .42 in the top 21–40 institutions, and .27 in the top 41–70 institutions. Finally, the results from time of promotion to associate professor to time of promotion to full professor indicate that successful promotion candidates at the top 10 institutions published an average of .61 articles in the leading marketing journals per year, compared with .43 in the top 11–20 institutions, .35 in the top 21–40 institutions, and .24 in the top 41–70 institutions.

We also analyzed whether there were any changes over time with regard to average-per-year publications for promotion for the different tiers of institutions. For each tier, we split the sample into three equal periods: (1) 1992–1996, (2) 1997–2001, and (3) 2002–2006.⁸ We conducted an analysis of variance (ANOVA) to check for equality of means across periods.⁹ The results of the analysis show that for the top 10 and top 11–20 tiers, there was no change across time in the average-per-year publications for successful candidates for promotion. For the top 21–40 tier, the

⁸We also split the sample according to a median split. However, the substantive results were similar, and we believe that the analysis of the split into three groups provides more information; therefore, we report results of the analysis of the split into three groups.

⁹The sample size was large enough that the ANOVA was robust to violations of the normal distribution assumption; however, as a control, we also conducted the Brown–Forsythe test of equality of means. There was no conflict between the results of the ANOVA and the Brown–Forsythe test for all analyses.

TABLE 1
Publication Productivity in the Four Leading Marketing Journals Across Institutions: 1992–2006

	Conferral of PhD to Promotion to Associate Professor			Conferral of PhD to Promotion to Full Professor			From Promotion to Associate Professor to Promotion to Full Professor		
	Per-Year Average	SD	Normalized Average	Per-Year Average	SD	Normalized Average	Per-Year Average	SD	Normalized Average
Top 10	.57	.73	3.39	.59	.77	7.05	.61	.79	3.68
Top 11–20	.47	.63	2.82	.48	.64	5.76	.43	.64	2.58
Top 21–40	.47	.66	2.82	.42	.58	4.99	.35	.54	2.09
Top 41–70	.26	.48	1.57	.27	.49	3.21	.24	.49	1.46

average number of publications per year from PhD conferral to promotion to associate professor was different for the three groups ($F(2, 512) = 4.05, p < .05$). The results of the Tukey test demonstrate that average-per-year publications decreased from the 1992–1996 period (.57) to the 2002–2006 period (.42). However, the average-per-year publications from PhD conferral to promotion to full professor and for the promotion to full professor from promotion to associate professor showed no significant change over the three periods. For the top 41–70 tier, the average number of publications per year from PhD conferral to promotion to associate professor was different for the three groups ($F(2, 616) = 4.42, p < .05$). The results of the Games–Howell test demonstrate that the average-per-year publications increased from the 1992–1996 period (.21) to the 1997–2001 period (.32).¹⁰ However, the average number of publications per year from PhD conferral to promotion to full professor and for the promotion to full professor from promotion to associate professor showed no significant change over the three periods.

Furthermore, examination of the normalized average number of publications and the normalized range for each stage of promotion indicates considerable variance in publications for all levels of promotion.¹¹ For example, the normalized average number of publications from conferral of PhD to promotion to associate professor was 3.39, with a normalized range from .00 to 8.00 for the top 10 institutions; 2.82, with a normalized range from .00 to 7.20 for the top 11–20 institutions; 2.82, with a normalized range from .00 to 9.00 for the top 21–40 institutions; and 1.57, with a normalized range from .00 to 7.50 for the top 41–70 institutions. Similarly, the normalized average number of publications from conferral of PhD to promotion to full professor was 7.05, with a normalized range from 1.09 to 16.00 for the top 10 institutions; 5.76, with a normalized range from .00 to 13.20 for the top 11–20 institutions; 4.99, with a normalized range from .00 to 12.00 for the top 21–40 institutions; and 3.21, with a normalized range from .00 to 16.00 for the top 41–70 institutions. Finally, the normalized average number of publications from promotion to associate professor to promotion to full professor was 3.68, with a normalized range from .00 to 12.00 for the top 10 institutions; 2.58, with a normalized range from .00 to 9.00 for the top 11–20 institutions; 2.09, with a normalized range from .00 to 8.00 for the top 21–40 institutions; and 1.46, with a normalized range from .00 to 6.00 for the top 41–70 institutions.

Research Question 2: What Level of Publication Productivity in the Leading Marketing Journals Warrants Exception?

Research Question 2 examines what level of publication productivity warrants exception when considering the leading marketing journals. We conducted multiple analyses to

¹⁰We used the Games–Howell post hoc test because the assumption of homogeneous variance was violated.

¹¹The normalized range is the range from the lowest individual scholar normalized average to the highest individual scholar normalized average.

explore this question. The first analysis was a calculation of the average number of publications for each scholar per year active (R_i), in which subscript “i” represents an individual scholar. To conduct this analysis, it was necessary to exclude (1) scholars without a PhD ($N = 124$; $\mu_{\text{Publications}} = 1.12$, minimum = 1, maximum = 4), because the granting date of the PhD provides data regarding time active from 1982 to 2006; (2) scholars for whom we were unable to identify PhD-granting dates or retirement dates (when appropriate) ($N = 72$; $\mu_{\text{Publications}} = 1.26$, minimum = 1, maximum = 4), despite contacting individual scholars, universities, and coauthors; and (3) scholars who received their PhD after 2001 or retired or passed away within the first four years of our data set ($N = 219$; $\mu_{\text{Publications}} = 1.36$, minimum = 1, maximum = 5), because Research Question 2 examines exceptional performance over a career, and we contend that a minimum of five years is necessary to establish a record on which a trend can be determined. In all, we retained a total of 2257 scholars in our data set to calculate R_i . We then sorted scholars according to their R_i . The findings indicate that 79.75% of retained scholars had an R_i between .040 and .275, 10.23% had an R_i between .276 and .464, 7.44% had an R_i between .465 and .799, and 2.57% had an R_i between .800 and 1.697. The 58 most prolific scholars according to R_i appear in Table 2.

Next, we calculated adjusted publication activity per scholar per year active (adjusted R_i), thus adjusting for the number of coauthors. To conduct this analysis, it was necessary to exclude the same scholars we excluded in the calculation of R_i , again leaving 2257 scholars in our data set. We sorted scholars according to their adjusted R_i . The results indicate that 79.53% of retained scholars had an adjusted R_i between .006 and .126, 10.46% had an adjusted R_i between .127 and .214, 7.80% had an adjusted R_i between .215 and .400, and 2.22% had an adjusted R_i between .402 and 1.105. The 50 most prolific scholars according to adjusted R_i appear in Table 3.

Furthermore, we conducted an unadjusted publication count of the 2672 scholars to identify the most prolific scholars according to unadjusted count in the period from 1982 to 2006 in the leading marketing journals. In relation to unadjusted count, 78.26% of scholars had an unadjusted count of between 1 and 3, 11.53% had an unadjusted count between 4 and 6, 8.35% had an unadjusted count between 7 and 14, and 1.87% had an unadjusted count greater than 14. The 50 most prolific scholars according to unadjusted count between 1982 and 2006 appear in Table 4.¹²

Research Question 3: What Drives Research Productivity in the Leading Marketing Journals?

Research Question 3 works to understand the drivers of research productivity in the leading marketing journals. Building on the extant literature in scientometrics (e.g., Gupta, Kumar, and Aggarwal 1999; Long et al. 1998;

¹²Note that though the calculation of R_i and adjusted R_i adjusts for the time a scholar is in the sample, Table 4 represents an overall productivity measure across the full 1982–2006 period and therefore is unadjusted for time. Furthermore, Table 4 does not account for these scholars’ pre-1982 publications.

TABLE 2
Top 58 Most Prolific Scholars in the Leading Marketing Journals During 1982–2006 by Publication Rate (R_i): PhD Received Before 2002

Scholar	Publication Rate	Scholar	Publication Rate
Pradeep K. Chintagunta	1.697	Wayne S. DeSarbo	.920
Stefan Stremersch	1.636	John R. Hauser	.920
Michel Wedel	1.515	Peter C. Verhoef	.909
Ran Kivetz	1.385	Kenneth H. Wathne	.909
Vikas Mittal	1.263	Ravi Dhar	.897
Donald R. Lehmann	1.200	Gita Venkataramani Johar	.889
Itamar Simonson	1.179	Carl Mela	.880
Alexander Chernev	1.158	Priya Raghurir	.880
Greg M. Allenby	1.135	Roland T. Rust	.880
Chris A. Janiszewski	1.128	Jan B. Heide	.872
Morris B. Holbrook	1.120	Jennifer L. Aaker	.870
Gerard J. Tellis	1.106	Gavan J. Fitzsimons	.870
Craig J. Thompson	1.103	Dhruv Grewal	.857
Paul E. Green	1.063	Ganesh Iyer	.857
Rajdeep Grewal	1.059	Baba Shiv	.857
Aric Rindfleisch	1.059	Vijay Mahajan	.840
Dilip Soman	1.053	Sunil Gupta	.829
Stephen M. Nowlis	1.040	Darren W. Dahl	.824
J. Jeffrey Inman	1.030	Puneet Manchanda	.824
Jan-Benedict E.M. Steenkamp	1.029	Duncan I. Simester	.815
Christine Moorman	1.027	William O. Bearden	.800
Barbara E. Kahn	1.022	Yuxin Chen	.800
Richard Staelin	.960	William R. Dillon	.800
Rajesh K. Chandy	.952	Claes Fornell	.800
Joseph C. Nunes	.941	Frenkel ter Hofstede	.800
Wagner A. Kamakura	.936	Donald G. Morrison	.800
Harald J. van Heerde	.933	Laura A. Peracchio	.800
Joan Meyers-Levy	.927	Werner J. Reinartz	.800
Jean-Pierre Dubé	.923	V. Srinivasan	.800

Nwagwu 2006; Prpic 1996), we explored publication productivity on the basis of a faculty member's institution of academic training and gender.

We conducted an ANOVA and the Brown–Forsyth test of equality of means to examine this research question.¹³ The results of these analyses appear in Tables 5 and 6. The ANOVA and Brown–Forsyth test of equality of means for different ranks of institution of academic training indicated a difference in mean publication rate ($F(4, 2252) = 16.82, p < .001; F^*(4, 2136.62) = 17.13, p < .001$).¹⁴ Because of unequal variance across groups and unequal group size, we used the Games–Howell test to determine which means were different. The results of the Games–Howell test indicate that graduates of the top 10 institutions had a higher publication rate than those from the top 21–40 institutions ($p < .001$), the top 41–70 institutions ($p < .001$), and other

institutions ($p < .001$). Likewise, graduates from the top 11–20 institutions had a higher publication rate than those from the top 21–40 institutions ($p < .1$), the top 41–70 institutions ($p < .001$), and other institutions ($p < .001$). We found no other differences across institutions of academic training. The results of the ANOVA and the Brown–Forsyth test of equality of means indicate no influence of gender on publication rate ($F(1, 2255) = 1.07, p > .1; F^*(1, 755.27) = 1.26, p > .1$).

Discussion

This research was motivated by three research questions. The results of the analysis of publication productivity in the four leading marketing journals help answer these questions and provide implications for marketing academics and the institutions in which they are employed.

Research Question 1: What Level of Publication Productivity in the Leading Marketing Journals Does It Take to Get Promoted in Marketing Academia?

The results provide evidence of scholarly publication within the leading marketing journals and provide a foundation for the discussion of publication expectations. As we argued previously, institutions not only strive to enhance their intel-

¹³The sample size was large enough that the ANOVA was robust to violations of the normal distribution assumption; however, as a control, we also conducted the Brown–Forsythe test of equality of means. There was no conflict between the results of the ANOVA and the Brown–Forsythe test for all analyses. We conducted additional nonparametric tests, and they also provided the same substantive results as the ANOVA.

¹⁴ F^* represents the Brown–Forsyth statistic for the test of equality of means.

TABLE 3
Top 50 Most Prolific Scholars in the Leading Marketing Journals During 1982–2006 by Adjusted Publication Rate (Adjusted R_i): PhD Received Before 2002

Scholar	Adjusted Publication Rate	Scholar	Adjusted Publication Rate
Alexander Chernev	1.105	Stephen M. Nowlis	.453
Pradeep K. Chintagunta	.863	Jan B. Heide	.453
Ran Kivetz	.795	Jean-Pierre Dubé	.449
Craig J. Thompson	.678	Kevin Lane Keller	.443
Itamar Simonson	.658	Gavan J. Fitzsimons	.442
Morris B. Holbrook	.653	Priya Raghubir	.440
Stefan Stremersch	.636	Aric Rindfleisch	.431
Chris A. Janiszewski	.624	J. Miguel Villas-Boas	.430
Dilip Soman	.614	Aradhna Krishna	.429
Michael Lewis	.606	Laura A. Peracchio	.429
Michel Wedel	.596	J. Jeffrey Inman	.424
Joan Meyers-Levy	.561	Robert V. Kozinets	.421
Christine Moorman	.554	Wagner A. Kamakura	.420
Gerard J. Tellis	.553	Gita Venkataramani Johar	.420
Jennifer L. Aaker	.536	Barbara E. Kahn	.418
Greg M. Allenby	.527	John R. Hauser	.413
Donald R. Lehmann	.486	Ganesh Iyer	.413
Peter C. Verhoef	.485	K. Sudhir	.412
Elizabeth C. Hirschman	.480	Lisa E. Bolton	.410
Joseph C. Nunes	.475	Michel Tuan Pham	.407
Erica Mina Okada	.467	Claes Fornell	.405
Paul E. Green	.463	Zeynep Gurhan-Canli	.403
Birger Wernerfelt	.463	Ann E. Schlosser	.403
Ravi Dhar	.460	Rajdeep Grewal	.402
Vikas Mittal	.456	David Glen Mick	.402

lectual environment but also set forth an expected position (i.e., ranking, within the greater academic community). The results indicate that expectations for faculty productivity are related to the rank within the select institutions at the time of promotion. For example, the top 10 institutions expect more than twice as many publications per year in the leading marketing journals than institutions ranking in the top 41–70. This general proportion across institutional segments holds for promotion to full professor from promotion to associate professor and for overall expected publications in the leading marketing journals for promotion to full professor from the conferral of the PhD. The results are consistent with the economic concept of imperfect substitution (Rosen 1981) in that higher-tier institutions view marketing faculty with lower productivity in the leading marketing journals as imperfect substitutes, thus conditioning reassignment to lower ranking institutions in which the productivity level of the faculty member is more closely aligned.

Although these findings provide some insight into how many leading marketing journal articles it takes to get promoted at the top 70 marketing institutions, the range in number of leading marketing publications among those promoted suggests that promotion is not purely dictated by a hard-and-fast rule pertaining to number of publications in the leading marketing journals (e.g., five publications in five years), thus suggesting, consistent with Wilkie (2005), that institutions consider other factors beyond simply leading marketing journal publications in promotion decisions (e.g., quality of publications, scholarly impact, teaching

quality, national reputation) (see Bartels 1983; Beltrami, Schlacter, and Kelley 1985). Although many aspects go into promotion decisions, to understand the publication aspect of this issue further, we expanded our investigation to explore publication productivity more fully. Specifically, Lehmann (2005) indicates that in some areas of marketing, faculty members have begun publishing in discipline journals (e.g., *Journal of Applied Psychology*), viewing leading journals in psychology or economics as at least equal to, and in some cases better than, publication in leading marketing journals. As such, we expanded our investigation using the ranking of leading nonmarketing journals employed by Mittal, Feick, and Murshed (2008) to provide a broader examination of marketing faculty publication productivity.

The expanded analysis found a similar pattern to the leading marketing journal analysis across institutional tiers. Specifically, in the examination of promotion to associate professor from conferral of PhD, the findings indicate that the average number of published articles of successful promotion candidates at the top 10 institutions increased from .57 leading marketing journal publications per year to .82 leading journal publications per year. Similarly, for institutions ranked in the top 11–20, the average number of articles published rose from .47 when considering only leading marketing journals to .62 when considering all leading journals. For promotion to full professor from conferral of PhD, the average number of articles published by successful promotion candidates in the top 10 institutions rose from .59

TABLE 4

Top 50 Most Prolific Scholars in the Leading Marketing Journals: Articles Published During 1982–2006

Scholar	Published Articles	Scholar	Published Articles
Donald R. Lehmann	30	John G. Lynch Jr.	18
Pradeep K. Chintagunta	28	Jan-Benedict E.M. Steenkamp	18
Morris B. Holbrook	28	Birger Wernerfelt	18
Gerard J. Tellis	26	Joseph W. Alba	17
Michel Wedel	25	Russell W. Belk	17
Richard Staelin	24	Hubert Gatignon	17
Wayne S. DeSarbo	23	Paul E. Green	17
John R. Hauser	23	Sunil Gupta	17
Barbara E. Kahn	23	Jan B. Heide	17
Itamar Simonson	23	J. Jeffrey Inman	17
Chris A. Janiszewski	22	George John	17
Wagner A. Kamakura	22	Scott A. Neslin	17
Roland T. Rust	22	Charles B. Weinberg	17
Greg M. Allenby	21	Shelby D. Hunt	16
Vijay Mahajan	21	Deborah Roedder John	16
William O. Bearden	20	Lakshman Krishnamurthi	16
William R. Dillon	20	Craig J. Thompson	16
Claes Fornell	20	Russell S. Winer	16
Donald G. Morrison	20	William Boulding	15
V. Srinivasan	20	Gary L. Frazier	15
Wayne D. Hoyer	19	Dhruv Grewal	15
Joan Meyers-Levy	19	Gary L. Lilien	15
Christine Moorman	19	Durairaj Maheswaran	15
Jehoshua Eliashberg	18	Robert J. Meyer	15
Stephen J. Hoch	18	Brian Sternthal	15

TABLE 5

Results of the ANOVA and the Brown–Forsyth Test of Equality of Means for Institution of Academic Training Tier

	Top 10	Top 11–20	Top 21–40	Top 41–70	Other	f	Brown–Forsyth Statistic
N	511	419	474	382	471		
Publication rate	.235	.206	.175	.149	.144	16.82*	17.13*

* $p < .001$.

TABLE 6

Results of the ANOVA and the Brown–Forsyth Test of Equality of Means for Gender

	Female	Male	f	Brown–Forsyth Statistic
N	443	1814		
Publication rate	.175	.186	1.07	1.26

leading marketing journal publications per year to .79 when considering all leading journals and increased from .48 to .59 for institutions ranked in the top 11–20. Finally, for promotion to full professor from promotion to associate professor, the average number of published articles of successful promotion candidates in the top 10 institutions rose from .61 leading marketing journal publications per year to .79 when considering all leading journals and increased from .43 to .52 when examining institutions ranked in the top 11–20. These results suggest that institutions consider publications in leading journals outside the four leading marketing

journals when making promotion decisions. Furthermore, the results of the expanded analysis indicate that institutions set higher publication productivity standards when considering a marketing scholar’s complete publication record.

Research Question 2: What Level of Publication Productivity in the Leading Marketing Journals Warrants Exception?

To assess the level of publication productivity warranting exception, we examined scholar rate of publication (i.e., the number of publications in the leading marketing journals per year since conferral of the PhD) and adjusted rate of publication (i.e., scholar rate of publication adjusted for multiple authors) (Tables 2 and 3, respectively). The distribution of rate of publication and adjusted rate of publication is consistent with Rosen’s (1981) concept of superstars in that a very small set of scholars substantially outperform the market. For example, the top marketing scholars presented in the tables represent a small percentage of all scholars publishing in the leading marketing journals during the specified periods. These scholars were able to achieve

publication levels in the leading marketing journals at a minimum rate of .800 publications per year (Table 2). This rate is substantially higher than the average publication rate for all scholars studied of .184, as well as the average rate for promotion at the institutions examined, thus indicating a level of exceptional productivity. Furthermore, to assess overall productivity warranting exception, we examined scholarly contribution to the leading marketing journals over the 1982–2006 period (Table 4). Each of these scholars contributed 15 or more articles to the leading marketing journals. This level of contribution is noteworthy because the average level of contribution of the remaining 2622 scholars (i.e., those outside the top 50) contributing to the leading marketing journals over the 1982–2006 period was 2.50, and more than 78% of all scholars publishing in the leading marketing journals published between one and three articles.

Research Question 3: What Drives Research Productivity in the Leading Marketing Journals?

Building on the work in scientometrics (e.g., Long et al. 1998; Prpic 1996, 2002), we explored two specific drivers of publication productivity in the leading marketing journals: (1) the scholar's PhD-granting affiliation and (2) the scholar's gender. Contrary to the findings of Long and colleagues (1998) and Williamson and Cable (2003), our findings indicate that the level of institution from which a scholar receives his or her academic training can be used as an indicator of potential academic success. However, our findings indicate that, on average, only those whose training was obtained at the top 20 institutions had higher publication rates in the leading marketing journals (with differences existing between those who graduated from the top 10 institutions and those who graduated from the top 11–20). As such, our results add greater specificity to the extant scientometrics literature. Practically, our results can assist institutions in their use of academic origin as a signal of potential productivity in the leading marketing journals. Because institutions often use the PhD-granting institution as a signal of quality, this study provides empirical support and specificity for when academic training may lead to increased publication productivity in the leading marketing journals and when it may not.

Finally, we examined the influence of gender on publication productivity in the leading marketing journals. Our findings are contrary to those of Prpic (2002) and others (e.g., Over 1982; Rogers and Maranto 1989), who show that, on average, female scholars were less productive than their male counterparts. Rather, our findings are consistent with those from the field of management (see Park and Gordon 1996; Williamson and Cable 2003), in which gender was not found to be a significant determinant of publication productivity in the context of marketing scholars. Because the scholars examined in this study are consistent in discipline with the scholars examined by Park and Gordon (1996) and Williamson and Cable (2003) (i.e., business scholars), as opposed to those in the hard sciences, we argue that the inconsistent findings in the scientometrics literature may be the result of cross-discipline effects.

Limitations, Future Directions, and Conclusion

Although this study provides several new insights, it is not without its limitations. First, although this study focused on the four leading marketing journals, it is important to recognize that marketing scholarship is published in journals outside those included in this study. As we noted previously, Lehmann (2005) argues that many marketing scholars target discipline journals. Thus, our identification of the average number of publications for successful promotion candidates, as well as overall scholarly productivity in the marketing discipline, is somewhat limited. However, consistent with Day and Montgomery (1999), we contend that to maintain the momentum of marketing and to diminish its cessation to other disciplines, the focus on the leading marketing journals is appropriate for this study. Furthermore, we contend that marketing faculty are, or should be, stewards of the marketing discipline, which necessitates a focus on the leading journals in marketing because marketing thought development advances more rapidly by publication within the discipline's leading journals than by publication outside the discipline.

Second, this work focused solely on the field of marketing as a whole and not on specific subareas of marketing. Thus, although this analysis helps clarify levels of exceptional publication productivity, note that *JM*, *JMR*, *JCR*, and *MKS* were developed to serve unique communities of scholars. Building on Rosen's (1981) work, Adler (1985) argues that relaxing the assumption of similar consumer tastes across categories allows each category to constitute a market with its own group of stars. The view of marketing as composed of separate submarkets can be observed by people who warrant exception within their smaller academic community (focused around a specific journal). Here, two points are relevant. First, size of the market is critical to understanding imperfect substitution (Murphy, Schleifer, and Vishny 1991). Murphy, Schleifer, and Vishny (1991) argue that being a superstar in a large market pays off more than being a superstar in a small market. Furthermore, they theoretically demonstrate that growth in submarkets provides substantial advantages to the superstars in these submarkets. As such, the analysis of submarkets within marketing, through the examination of journal communities, could be argued to be built on theoretical rationale under the economics of superstars. Second, it could be argued that different institutions have different preference structures for academics focusing their efforts on specific journals and, therefore, that assignment becomes important. Theoretically, this is consistent with the work of Bowbrick (1983), who argues that there is also an aversion effect of preference structure within some categories for certain attributes. Applied within the marketing discipline, this would be consistent with some institutions focusing on a specific domain of marketing and working to recruit and retain marketing faculty who demonstrate superior productivity within that specific domain and/or journals and being averse to those of other domains and/or journals. Research on this issue could further enhance the understanding of recruitment and retention.

Third, the focus of this study was on scholarly productivity, not impact. As such, it could be argued that examining either the impact score of the journal or the citation rate for a specific author/article may increase the understanding of those influencing the field of marketing. For example, Stremersch, Verniers, and Verhoef (2007) denote specific drivers of article citation and find that highly productive authors have more citations. However, although citations serve as one measure of impact, citational analysis assumes that the citations of a specific article are being made for substantive purposes (i.e., the normative theory of citation), which may not be the case. As such, one research question that could be examined is whether the most prolific authors in the field are those who influence the development of the field through substantive citations or whether the substantive advances in marketing are made by less prolific authors. For example, one way to determine whether citations are substantive is to apply the rule of “must be cited more than once” within an article. An alternative method of assessment would be an examination of how an article is employed when it is cited. Through the examination of substantive contribution, marketing as a field could move toward evaluating research more effectively, rather than simply counting a specified number of publications or citations.

Fourth, this study is limited by its temporal exposition. Specifically, our analysis was conducted at a time when the field’s leading journals are in a state of transition. For example, in 2006, *MKS* became the first leading marketing journal to move beyond four issues per year. This move was shortly followed by *JM* and *JMR* (in 2008). Thus, although

our analysis helps provide data pertaining to the specified research questions from historical data, it is unclear as to their direct applicability to an environment in which a greater number of issues of these journals are published (e.g., Will institutions raise expectations for publications in the leading journals now that the leading journals are publishing more articles?).

Fifth, note that we selected a specific 25-year period and that the selection of any other period (even simply shifting from 1982–2006 to 1983–2007) would result in different findings because the productivity of any single author varies according to his or her individual research cycles and publication dates. Another period could identify a unique set of authors from those identified in this study.

In conclusion, the purpose of this study was to examine the following questions: (1) What level of publication productivity in the leading marketing journals does it take to get promoted in marketing academia? (2) What level of publication productivity in the leading marketing journals warrants exception? and (3) What drives research productivity in the leading marketing journals? Employing the economic concept of imperfect substitution and relying on insights from the field of scientometrics, we advanced the idea of promotion as a governance mechanism to work toward understanding these three publication-related research questions. We believe that the findings provide new insights that are important to the development of the field. Furthermore, we believe that the findings ask marketing faculty to question the stewardship role regarding the marketing discipline.

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