Measuring the Research Performance of Marketing Academics: Issues, Methods, and Further Research Directions

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The authors focus on the measurement of research performance in academia, with particular emphasis on marketing education. They conclude that there is considerable scope to improve the comprehensiveness and sophistication of research productivity assessments in the context of marketing education and that marketing can benefit from approaches used in other academic fields. They also make suggestions for further research.

Performance measurement in research is difficult and controversial, partly because of the absence of an obvious "objective" measurement scheme that can be readily applied to capture the many influences that can impinge on research productivity (Kaufman 1984). However, although recent years have witnessed an increasing emphasis on teaching in many U.S. (Weis 1990), European (Der Spiegel 1991, 1993; Walle 1991), and Asian (Syrett 1993) universities, research performance is still widely used in productivity assessment and influences promotions, tenure decisions, and teaching loads (Niemi 1988).

In the science and social science literatures, the measurement of research productivity already has been a subject of sophisticated discourse for several years. Numerous articles about how to measure research productivity have been published; however, the resultant knowledge about the relations between research input and output has been so rudimentary that more research has been called for (Averch 1989). In fact, "consideration of productivity, or the ratio of output to each of the inputs used in the process of production, has been extremely limited" (Johnes 1989, p.17). We examine the various research performance measurement techniques and the problems associated with them with specific reference to marketing education. Addressing the issue of measurement of research output is a first and necessary step in any attempt to identify individual and institutional factors (i.e., inputs) that can facilitate or pose barriers to research productivity. As Johnes (1989, p. 18) aptly put it, "once we know what a good environment for research looks like, we can set about creating that environment for more departments."

In the following section, we identify the key interest groups associated with the measurement of research productivity by marketing academics to highlight the practical significance of the topic. Next, we view research performance indicators from a systems perspective, placing particular emphasis on output measures. Following this, we review different research productivity measures and relate them to investigations conducted in the marketing discipline. We conclude with an agenda for further research.

Key Interest Groups in the Measurement of Research Performance

Five major groups can be identified for which the measurement of research performance within an academic discipline (such as marketing) is an issue of concern: academic administrators, academic staff, students, industry practitioners, and society at large. Although each of these groups pursues different objectives and utilizes research assessments for different purposes, they all share a common need, namely that for information on research performance. This can be measured at different levels of aggregation (e.g., individual, department, faculty/school, institution), and the interest groups differ in terms of the emphasis they place on each level.

Academic Administrators

Academic administrators are concerned with research performance measurements because they affect the management of the internal and external relationships of the academic institution.

Internally, research performance measures can be used to direct human resources and explicitly tie rewards to outcomes. The London Business School, for example, reviews faculty annually according to criteria in which research features prominently and salary is, to a degree, performance related (Currie 1991). In the United States, a nationwide survey on the evaluation policies and practices used by the American Assembly of Collegiate Schools of Business (AACSB) found that the importance of research and publication as evaluative criteria had increased sharply between 1975 and 1985 (Seldin 1985). However, reacting to criticism of overvaluing research at the expense of teaching, the AACSB recently approved radically new accreditation guide-
lines that allow schools to be accredited according to how well they live up to what they themselves declare to be their mission, regardless of whether the mission is predominantly teaching or research (Dulek and Fielden 1992). This change of policy is already resulting in changed evaluation criteria for individual academics; Thunderbird, for example, has introduced a management-by-objectives evaluation format in which professors can agree to what extent they are evaluated against research performance.

Externally, research performance measures serve mainly
to market the institution and/or marketing department to key target groups, such as the Universities Funding Council (UFC) in the United Kingdom. The UFC is interested in performance measurement to allocate research funds more selectively among institutions (Johnes and Taylor 1992). Since “performance indicators” were introduced into the U.K. higher education system in 1984, three “research selectivity exercises” have been undertaken (1986, 1989, and 1992) and university administrators have been “fighting” for research funds at each round. Inevitably, at a time of financial restrictions, the pressures on funding bodies to justify how they reach their decisions have become greater (Cave, Hanney, and Kogan 1991).

Marketing Academics

An important use of the outcome of research performance assessments at the departmental level is to attract high-caliber faculty (Currie 1991; Kaufman 1984; Niemi 1988; Soley and Reid 1983). It has been argued that a substantial number of marketing academics prefer a working environment in which research ideas are frequently discussed among colleagues.

Research performance, as already indicated, also directly affects the academic career of an individual in terms of promotion, tenure, and financial awards. Luke and Doke (1987) cite a survey of AACSB Deans, which indicates that 90% of the schools had formal research and publication programs and publication for promotion above the assistant rank was a requirement.

Students

Students, particularly graduate students, also are concerned with an institution’s research performance and reputation, because they seek to choose a program that will enhance their future career best (Soley and Reid 1983). A perceived overemphasis on research, however, also can be of concern in that professors might neglect students for the rewards of research (Weis 1990). Nevertheless, research standing is often used as one of the criteria to rank university institutions and graduate programs in directories/guides specifically targeted to potential students (see, e.g., the Annual Guide to America’s Best Colleges published by U.S. News & World Report and the MBA guide published by Canadian Business magazine). Moreover, there is evidence to suggest that universities with a high reputation in research are able to attract students of higher academic ability than institutions with poorer research records (Johnes and Taylor 1990).

Industry Practitioners

There are two main reasons industry is included as a key interest group in the measurement of research performance. First, companies may use the outcome of research performance assessments as a surrogate measure of the “quality” of an applicant’s education (Clark, Hancock, and Kamiński 1987). Second, marketing practitioners depend largely on academic institutions for the provision of innovative, leading ideas to them. To respond to this role, it is essential that universities develop and market (Fielden and Gibbons 1991) a strong research base, which can be transformed into business practices helping companies to meet the challenges they face (Currie 1991). In this context, it is of concern that the kind of research produced by business schools in general and marketing academics in particular (Simon 1992) is often viewed as fuzzy, irrelevant, and pretentious.

Society

Increasing costs in research and declining resources lead to greater demands for accountability from society; research performance evaluations are part of “an attempt to measure the success of various parts of the university system” (Johnes 1989, p. 16). The educational system and its subsystems has to prove it is worth private and social investment and that the social system as a whole gets a return for its investment (Averch 1989). Thus, marketing departments as a part of higher education institutions increasingly are asked to justify their activities and account for their performance to society in terms of their achievements in various areas, one of which is research.

Performance Measurement From a Systems Perspective

The notion of work performance measurement relates to the methods that provide quantitative indexes of the degree to which employees demonstrate certain work behaviors and of the result of those behaviors (Landy and Farr 1983). More specifically, a performance indicator is a measure that relates outputs (i.e., achievements) to inputs (i.e., resources) and thus describes the “efficiency” of a system (Gillett 1989). In assessing research performance, the input side is often not explicitly or adequately taken into consideration, despite the fact that “universities vary considerably in the type and quantity of inputs they use to produce outputs” (Johnes and Taylor 1990, p. 60); instead, “the tendency in the past has been to produce league tables of departmental output” (Johnes 1989, p.17).

Bearing this in mind, it seems sensible to view the marketing department as a subsystem of a university and identify the relevant input and output variables relating to it. Such a systems view is shown in Figure 1 and implies that, in principle, performance indicators can be introduced at different parts of the system. With regard to inputs, performance indicators focus on the quantity and quality resources (e.g., money, staff, students) used by the system (Cave, Hanney, and Kogan 1991). In-process indicators focus on the various ways resources (i.e., inputs) are used by the processing system; the latter is the marketing department, in which three main activities take place: research,
teaching, and service. Examples of in-process performance indicators are teaching evaluations and staff development reviews. With regard to outputs, performance indicators attempt to capture output derived from teaching activities, research activities, and consultancy and cultural and social outputs (Johnes and Taylor 1990). Our focus here is exclusively on output related to research.

The appeal of the model outlined in Figure 1 is that it explicitly links inputs to outputs and thus enables research performance to be assessed in the context of resource constraints. It also identifies the stages at which performance indicators can be applied and thus highlights the complexities of a comprehensive research performance assessment. Finally, it provides an initial framework for isolating the various factors that can affect research performance (e.g., department-specific versus external influences).

Measures of Research Performance: A Review

According to Landy and Farr (1983), a work performance measure must meet the following five criteria: It must be reliable (deal with random error), valid (actually measure what it purports to measure), accurate (produce results subject to minimum uncertainty), practical (applicable to real-life situations), and standardized (can be applied uniformly). Thus, a measure of research performance ideally should possess all these properties and it should be evident which aspect(s) of performance is captured by a given measure. Distinctions can be drawn between quantity, quality, importance, and impact of research (Johnes 1988; Martin and Irvine 1983; Moed et al. 1985), and different measures tend to capture these aspects to differing degrees. Thus, "a count of publications can measure quantity; a count of either publications in top journals or of citations can measure impact.... Bibliometric tools are clearly not appropriate as means whereby either importance or quality can be assessed" (Johnes 1989, p. 17).

The issue of publication performance (measured with various methods) has attracted a large number of empirical studies in economics (e.g., Davis and Papanek 1984; Graves, Marchand, and Thompson 1982; Yontopoulos 1961), finance (e.g., Ederington 1979; Klemkosky and Tuttle 1977; Niemi 1987), accounting (e.g., Bazley and Nikolai 1975; Carpenter, Crumbley, and Strawser 1974; Dyl and Lilly 1985), and education (Wayne, Clark, and Betley 1987). In what follows, the different methods found in the literature are outlined and their advantages and shortcomings highlighted, and attempts to measure research performance within the marketing discipline are examined against this background.

Count of Publications

One of the most frequently used measures of research output is counting the number of papers published by the individual or group (Whitley and Frost 1971). Although this measurement is widely recognized by social scientists as a surrogate measure of faculty and institutional quality (Dyl and Lilly 1985; Soley and Reid 1988), it also has been argued that the sheer number of publications cannot in itself capture their quality or impact (Endler, Rushton, and Roediger 1978).

One of the problems with publication counts is deciding which type of publications to include in an evaluation (e.g., articles in refereed and nonrefereed journals, papers for proceedings, research monographs, textbooks, software) (Johnes 1989). Each publication category presents its own set of problems and, to make comparisons between categories, some form of weighting system is needed. Braxton and Bayer (1986) compared different weighting systems and found that original scholarly books and monographs receive higher weights than do journal articles, textbooks
score higher than do edited books, and edited books equal articles in high-quality journals but score higher than articles published in journals of lower perceived quality. Empirical evidence also suggests that the production of books is negatively correlated to the production of journal articles (Cox and Catt 1977), and this may reflect the fact that, in social science at least, books are not the best vehicle for building up a reputation; according to Davis and Astin (1987), articles in prestigious journals and book chapters are more useful.

Focusing on journal articles, publication counts pose the following dilemma: "If only a few journals are considered, specialization is penalized; if all publications are taken into account undue weight would be given to ephemera and research of relatively low profile" (Johnes 1989, p. 17). On the other hand, it has been argued that counting contributions only to leading journals does not measure the critical and innovative aspects of articles (Davis and Papanek 1984; Miller 1972). Moreover, differences in the quality of journals also lead to an aggregation problem. Assuming journal quality is rated from 1 (lowest quality) to 4 (highest quality), adding would result in a higher rating of a researcher with, for example, 11 articles in category 1 journals compared with a researcher with 2 publications in category 3 journals and 1 in a category 4 journal. Although averaging would avoid this problem, in the extreme, it also would rate the research performance of a person with 1 article in a category 4 journal higher than the performance of a researcher with 5 articles receiving a weight of 4 and 1 article receiving a 3. Clearly, neither an averaging nor an additive model is satisfactory. However, in applying one method or the other, it should be borne in mind that what gets measured gets attention, particularly when rewards are tied to the measure (Eccles 1991). In an environment of growing pressure to publish (Browne and Becker 1985; Davis and Astin 1987), academicians start becoming "creative" to enlarge their publication record. One relatively easy way of doing this is through duplication, that is, repeated publication of the same, or similar, material in different outlets. This practice is on the increase (Broad 1981).

Other points to consider are whether to give credit to the whole department or an individual faculty member (Clark 1986; Niemi 1988), whether the age of faculty members should be taken into account (Baird 1986), and how the time lag between completing a piece of research and its publication should be treated. The last often can be two years (Johness 1989), and the problem is compounded if the author moves to a different institution in the meantime (Johnes and Taylor 1990). Although some scholars give credit to institution affiliation at the time of authorship (e.g., Marquardt and Murdock 1983) in an attempt to capture the current research potential rather than past research activity, the majority view is that credit should be given to the institution where the author is employed at time of publication (e.g., Davis and Papanek 1984; Henry and Burch 1974). Finally, there is the question of how to divide credits in case of coauthored papers. The fractional credit method divides credits equally (e.g., Graves, Marchand, and Thompson 1982; Hirsch et al. 1984), and the full credit method grants full credit to every author. Needless to say, if multiple authors are members of the same department, the latter approach can inflate the total (i.e., departmental) publication count artificially.

Count of Pages
It has been suggested that the length of journal articles should be taken into account when counting the number of publications (Hirsch et al. 1984). One way of doing this is to count delivered pages instead of delivered articles to selected journals. For example, Graves, Marchand, and Thompson (1982) came up with a departmental ranking in economics based on standardized page counts of articles published in 24 top journals, the argument being that if one would not take the variation of articles in length into account, one would open the door for manipulation; a few short papers instead of one long article can boost the publication list of a career-oriented academician. However, all that page counts do is provide a more accurate indication of research quantity, and thus they are subject to the same problems and complications surrounding publication counts.

Citation Counts
Counting the number of citations per annum is considered to be a better measure of research quality, in contrast to publication counts and page counts, which are largely measures of quantity. The rationale is that when conducting research in a given subject, a researcher usually surveys (and hence cites) relevant literature on the basis of its relative "quality" (Moed et al. 1985). The founding of the Institute for Scientific Information (ISI) by Eugene Garfield has led to a burgeoning use of citation measures in the last quarter century. The principal products of the ISI (i.e., the establishment of the Science Citation Index [SCI] in 1961, Social Science Citation Index [SSCI] in 1973, and Arts and Humanities Citation Index [AHSII] in 1978) led to easily accessible measurement of citations in a wide variety of archival sources, also covering some years before the indexes were established (Braxton and Bayer 1986). Wallmark and Sedig (1986) say that one advantage of this method is objectivity, because no personal evaluation is necessary and the investigated person or group need not actually participate in the research assessment. Another benefit is the low cost of citation counts in terms of time and money: Compared with peer review, the citation method is about 200 times less costly (Wallmark and Sedig 1986).

Although it is widely held that citation counts reflect the quality of scholarship, Field and Lovell (1992) found in an analysis of citations in management and continuing education little or no support that citations reflect the quality of scholarly work more accurately than subjective judgments through peer reviews. According to their findings, the most frequently cited works possessed value more for their symbolic than academic status. For example, in management education, Peter and Waterman's popular book In Search of Excellence was the most frequently cited publication in the management literature during the 1980s, whereas research-based publications received lower citation counts.

A closer look at citation counts reveals several other problems. First, citation indexes only give credit to the first author of a publication (Campbell and Campbell 1982). Sec-
ond, there is a "coverage problem," because not all relevant journals in a field are included. For example, the SSCI 1991 Annual Guide and List of Source Publications lists the following journals for the field of marketing: Industrial Marketing Management, Journal of Advertising, Journal of Advertising Research, Journal of Consumer Research, Journal of Marketing, Journal of Marketing Research, Journal of Public Policy & Marketing, Journal of Retailing, Journal of the Market Research Society, Marketing Science, and Public Relations Review. This is only a small proportion of marketing outlets and is extremely skewed toward U.S. journals. Well-established European-based journals such as the European Journal of Marketing or the International Journal of Research in Marketing are not covered.

Of concern as well are the reasons for citation; thus, it has been argued that "the surest way to get widely cited is to publish survey articles (which involve little or no original contribution) or to publish arguments which are demonstrably incorrect (which involves a negative contribution)" (Johnes 1989, p. 17). In the latter instance, one is dealing with "negative citations," whereby the scholar concerned gets credit for low-quality work, because colleagues are citing the publication as a negative example.

Further complications arise because raw citation counts do not take into account the standing or prestige of the journal in which the cited work was published. To deal with this issue, attempts have been made to use citation counts to measure the impact of different journals (as opposed to authors) in a given field (Jobber and Simpson 1988). Of course, the extent to which a journal is cited is greatly influenced by the cumulative number of articles the journal has produced over its lifetime (Pecotich and Everett 1989). This implies that the number of citations an article receives is not solely determined by its own merit but also the average influence of the journal in which it appears; in short, authors should take care where they publish (Liebowitz and Palmer 1984).

Citation counts also are criticized for not giving adequate credit to premature discoveries (i.e., work that is highly significant but so far ahead of its time in the field that it goes relatively unnoticed). On the other hand, there is the "phenomenon of obliterition," which takes place when a scientist's work becomes so generic in the field and highly integrated into the body of knowledge that other researchers frequently neglect to cite it explicitly. However, this tends to happen only to work that makes a very fundamental contribution.

Finally, it is worth bearing in mind that the citation potential can vary significantly from discipline to discipline and even from subject to subject in a given field. But despite all the difficulties outlined here, evidence exists in the literature that citation counts provide an objective measure of productivity, significance, quality, utility, influence, effectiveness, or impact of a scholar and his or her scholarly products (Braxton and Bayer 1986).

**Peer Review**

Peer review is a generic term for a set of assessment methods in which the work of academicians is evaluated by fellow scholars, usually from other institutions (Gillett 1989; Kruytbosch 1989; Noble 1974). It differs from the bibliometric methods considered thus far in that it involves asking a group of experts to make their own (subjective) judgments. However, when these judgments are averaged over a number of experts, it is usually the case that the results of publication, citation, and peer review analyses tend to converge (Martin and Irvine 1983).

According to Kane and Lawer (1978), three types of peer assessment can be distinguished: peer nomination by designating the best researcher(s), peer rating by employing various performance rating scales, and peer ranking by ordering all group members from best to worst.

In principle, peer review has the advantage that it can include all aspects of research such as quantity, quality, and impact (Johnes and Taylor 1990). However, in practice, there are problems with this method, some of which can be rather serious.

First, peer reviews have been criticized for the high level of subjectivity. The opinions of peers are influenced by their loyalty to the institution, what is often known as the alumni effect; those who have taught or studied in a department tend to rate it higher than it should be (Webster 1985). Even the selection of reviewers can be a highly subjective process. In cases of tenure or promotion, the candidates themselves are often consulted for names of possible referees, and thus personal contact and impressions can have a greater impact than the scholarly ability of the candidate (Braxton and Bayer 1986).

Another criticism mentioned in the literature is the halo effect: The raters assessing a single department are often substantially influenced by the overall reputation of the institution (Cave, Hanney, and Kogan 1991; Webster 1985). It also has been said that peer evaluations correlate so highly with department size that they are unnecessary (Webster 1985). Clearly, a large department is more visible, and thus chances are much higher that someone on the review panel will know the work of at least one of its members (Johnes 1989; Johnes and Taylor 1990). As a result, there is a tendency for large departments to do well in peer reviews (Gillet and Aitkenhead 1987).

Finally, there is also the question of time lag, which refers to the time elapsed before changes in a department's personnel are actually reflected in peer ratings; for example, a department may retain its reputation long after an eminent researcher has left (Johnes and Taylor 1990). There also can be long bureaucratic delays before peer review results are published. In this context, it has been said that some evaluations are several years behind reality (Smith and Fielder 1971; Webster 1981).

**Refereeing Activities**

Journal editors and referees play the role of "gatekeepers" and have a powerful position in controlling the allocation of journal space (Whiteley and Frost 1971). Given the importance of the refereeing function, it seems reasonable that editorial review board members must have the confidence and trust of their colleagues in the journal's area of coverage for the journal to be successful in attracting high-quality submissions and building and maintaining its reputation. Thus, membership on editorial boards and reviewing activities re-
fects a professor's standing in the profession as perceived by his or her peers (Kaufman 1984). This approach for evaluating faculty members first was presented in the finance literature by Kaufman (1984) and later was introduced in the field of marketing by Kurtz and Boone (1988).

Although this method gives credit to an academic's senior status and reputation in the discipline, it is, nevertheless, only an indirect measure of actual research performance. Particularly problematic is the fact that the visibility gained through holding an editorial review board position itself can lead to requests to join the editorial boards of other journals.

**Holding Office in Professional Organizations**

Holding office in learned societies and associations is yet another indirect approach for evaluating the output of scholarly work, because offers of these positions will be made only to academics who already have made a worthwhile contribution to the field. Such involvement enhances the visibility of a academic and is considered more important than publishing in nonrefereed journals (Bohrer and Dolphin 1985). Besides the chance of being recognized as an active professional by the academic community, it also can have a positive influence on research productivity. For example, Blackburn, Behymer, and Hall (1978) found that a high correlation among communication links, research productivity, and professional associations is clearly part of the overall network of an academic. Bearing in mind that a criterion of a productive scholar is sharing information with colleagues (Jalongo 1985), conferences and meetings of professional organizations are a major vehicle for exchanging views and getting inspiration for one's own work.

**The Measurement of Research Performance in Marketing**

Since the mid-1970s, a number of studies of research productivity in marketing have been carried out. The majority of these have reported on the research performance of marketing faculty in the United States, an exception being Diamantopoulos, Schlegelmilch, and Neate-Stidson (1992), who examine U.K. marketing academics. Table 1 summarizes the U.S. studies.

With the exception of Kurtz and Boone (1988), who concentrate on editorial review board membership, the methodology of all U.S. studies was (1) to select certain high-quality academic marketing or advertising journals, (2) to establish from the published articles the authors' institutional affiliation at the time of authorship or publication, (3) to count the articles and give credit to the authors' institutions, and (4) to establish rankings of marketing departments according to the publication records of their faculty. In contrast to the U.S. studies, the U.K. investigation by Diamantopoulos, Schlegelmilch, and Neate-Stidson (1992) used a mail questionnaire to contact marketing academics directly and elicit information about their publications in different types of outlets (e.g., books, journals, conference proceedings). In view of the methodological differences, only very broad comparisons with the U.S. findings are possible.

One major finding of the studies listed in Table 1 concerns the concentration of publication and research activities in only a few major marketing departments of U.S. universities; moreover, joint publication appears to be the preferred route. Soley and Reid (1983, 1988) found that authorship since 1980 had become even more concentrated. The reasons behind such concentration include the presence of a doctoral program, lower teaching loads, more secretarial support, incentives and rewards for journal publication, and higher salaries (Graves, Marchand, and Thompson 1982).

The vast majority of authors published only one article in the selected journals over the researched period. This finding is consistent with surveys in other fields of business education. For example, Wayne, Clark, and Betley (1987) reported that approximately 77% of the authors or coauthors contributed only one article to four selected journals in a period of four years and four months.

Because an imposing record of scholarly output seems to be the key to advancement in rank (Coe and Weinstock 1983), it is interesting to look at publication activities in relation to academic rank (Table 2). Marquardt and Murdock (1983) found a positive correlation between frequency of authorship and the rank an academic holds; a similar pattern has been observed in the United Kingdom (Diamantopoulos, Schlegelmilch, and Neate-Stidson 1992).

Focusing on the academic/practitioner mix, Clark, Hancock, and Kaminski (1987) examined authors' professional affiliation in the Journal of Marketing Research in three different time periods between 1964 and 1985 (1964–1970, 1971–1978, and 1979–1985) and uncovered a trend toward even stronger academic domination. In the first period, 74% of the available fractional credits for articles were coded to academicians; in the second, 83%; and in the third, 87%. In advertising, Soley and Reid (1983, p. 466) interpreted their findings of 75% academic authors and 22% advertising practitioners as an indication that "advertising is a discipline in which academicians and practitioners share research results" and draw the conclusion that "the involvement of both academics and non-academics in advertising article productivity represents a healthy condition in advertising" (p. 469). Regardless of how Clark, Hancock, and Kaminski interpret the results, the figures speak for themselves, especially when taken into account the relatively small number of academicians in comparison with the large number of practitioners. Table 3 provides an overview of studies that look at the professional affiliation of authors.

**Conclusions and Further Research Directions**

The review of the literature on research performance measurement undertaken in this paper has several implications for the study of research productivity within the marketing discipline.

First, it goes without saying that the issue of research performance measurement is of central importance in the marketing discipline, not least because of the number and diversity of key interest groups that must be taken into consideration. A major challenge facing the discipline is reconciling the different objectives and needs of the various groups when undertaking research performance evaluations. To drive this point home, limiting research reviews to publications appearing in top refereed journals may be perfectly con-
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<th>Author</th>
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<td>Henry &amp; Burch</td>
<td>1974</td>
<td>1961–1965</td>
<td>Count Pages</td>
<td>JM, JMR, JR</td>
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<td>Moore &amp; Taylor</td>
<td>1980</td>
<td>1972–1978</td>
<td>Count Articles</td>
<td>JM, JMR, JCR</td>
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<td>Marquardt &amp; Murdock</td>
<td>1983</td>
<td>1960–1981</td>
<td>Count Articles</td>
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<td>• concentration of publication activities (authors from only 26 universities published 10 or more articles, only 9 universities had faculty members publishing an average of more than 1 article per year)</td>
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<td>• 91.6% of authors published only 1 or 2 articles over 21-year span</td>
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<td>• academic institutions account for about 76% of all authors</td>
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<td>Soley &amp; Reid</td>
<td>1983</td>
<td>1971–1980</td>
<td>Count Articles</td>
<td>JA, JAR, CIRA, JM, JMR, JCR, JQ, POQ, JCA, JB, PRR, IBR, JC, JBR, JR, JBu</td>
<td>• concentration of publication activities (approximately 41% of articles credited to faculty at only 20 universities)</td>
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<td>• more than half of articles credited to academicians was given to marketing faculty</td>
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<td>Clark</td>
<td>1985</td>
<td>1983–1984</td>
<td>Count Articles</td>
<td>JM, JMR, JME</td>
<td>• majority of individuals (85%) have authored or coauthored only 1 article, only 3.5% of authors had published 3 or more articles</td>
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<td>• 38% of articles single authored</td>
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<td>Clark</td>
<td>1986</td>
<td>1983–1984</td>
<td>Count Articles</td>
<td>JM, JMR, JR, JA, JAR, JME, IMM, JCR, JAMS</td>
<td>• concentration of publication activities (Top 33 schools received 40% of available credits for authoring)</td>
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<td>Clark &amp; Hanna</td>
<td>1986</td>
<td>Inaugural issue—Spring 1985</td>
<td>Count Articles</td>
<td>JME</td>
<td>• concentration of publication activities (authors at 31% of 105 schools contributed 57% of published pages)</td>
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<td>• 90% of the authors had only 1 article published</td>
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<td>• 91% of authors male</td>
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<td>• slightly more than half of articles single authored</td>
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<tr>
<td>Clark, Hancock, &amp; Kaminski</td>
<td>1987</td>
<td>1964–1985</td>
<td>Count Articles</td>
<td>JMR</td>
<td>• concentration in publication activities (Top 40 schools received 60% of total fractional credits)</td>
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<td></td>
<td></td>
<td></td>
<td>fractional credit method</td>
<td></td>
<td>• 77% of authors appeared only once</td>
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<td></td>
<td>• only 2.4% of all authors had contributed 6 or more articles</td>
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<td>• trend toward academic domination</td>
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<td>• only 4.17% of authors female</td>
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</table>
Table 1. Continued

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Period</th>
<th>Method</th>
<th>Journals</th>
<th>Key Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheatley &amp; Wilson</td>
<td>1987</td>
<td>1980–1985</td>
<td>Count Articles fractional credit method</td>
<td>JM, JMR, JCR, JR, JAR, AMA and ACR Proceedings</td>
<td>• concentration of publication activities (paradoxically the aggregate research output of Top 10 universities is only 18% of the total; top 10% of authors account for over 37% of papers)</td>
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<td></td>
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<td>• the 12 most productive scholars published an average of 1.67 articles per year</td>
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<td>• over 51% of authors were credited with less than 1 full article</td>
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<td>• a little over 38% of all papers single authored</td>
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<tr>
<td>Kurtz &amp; Boone</td>
<td>1988</td>
<td></td>
<td>Editorial Review Board Membership</td>
<td>JM, JMR, JCR, JME, JAR, JR, JCM, JAMS, JBR, JPSSM, IMM, JA, JMM</td>
<td>• Top 20 marketing departments supply 39.4% of academic editorial review board memberships</td>
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<td></td>
<td>• &quot;Big Three&quot; (JM, JMR, JCR) served with 62.6% of faculty employed in Top 20 marketing departments</td>
</tr>
<tr>
<td>Soley &amp; Reid</td>
<td>1988</td>
<td>1981–1985</td>
<td>Count Articles fractional credit method</td>
<td>JA, JAR, CIRA, JM, JMR, IMM, JB, EM, JC, JQ</td>
<td>• concentration of publication activities (over 50% of articles credited to academicians were authored by faculty at only 20 universities)</td>
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<td>• average article credited to 1.8 authors</td>
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<td>• academicians credited with 74.7% of ad articles</td>
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<td>• 42% of published ad articles were credited to faculty in marketing departments</td>
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<td>• comparing results with study conducted in 1983 shows significant changes</td>
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<tr>
<td>Niemi</td>
<td>1988</td>
<td>1975–1985</td>
<td>Count Pages</td>
<td>JM, JMR, JCR, JR</td>
<td>• great breadth in marketing research in leading academic institutions (35 programs published over 200 pages)</td>
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<td></td>
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<td></td>
<td>• Top 10 marketing departments delivered 440–749 pages</td>
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<td>• comparing results with earlier studies shows significant changes in research leadership in U.S. marketing departments in the past decade</td>
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<td>Barry</td>
<td>1990</td>
<td>Inaugural issues—the end of 1988</td>
<td>Count Articles fractional credit method</td>
<td>JA, JAR, CIRA</td>
<td>• 37% of the articles delivered by marketing faculty</td>
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<td>• 30% of authors had nonacademic affiliation</td>
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<td>• only 2.8% of total authors had appeared more than 5 times</td>
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<td>• average of 1.6 authors per article</td>
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<td></td>
<td>• 51% of articles were single authored</td>
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*Cannot be obtained from British Library


consistent with the ethos of the academic community but gives scant attention to the needs of the practitioner. Consequently, those researching review exercises must accept that different types of universities have different missions and adapt their approaches accordingly—for example, a university may have to decide between a review based on a narrow range of journals versus a more widely cast peer review system that also attempts to judge practical relevance of contributions. A stronger alignment between the missions of the institution and the chosen research review method is called for and, incidentally, also would fit better into the new AACSB mission-based environment.

Second, from the review of research performance indicators, it becomes clear that there is no single measure that can be used to capture all aspects of performance. All indicators suffer from drawbacks, and relying on any one of
them is unlikely to provide a true picture of the research standing of faculty. With particular reference to marketing, the concentration of U.S. studies on a limited number of refereed journals, while doing a good job in terms of identifying leading research centers in the discipline, penalizes academics who (1) publish primarily in European journal outlets and (2) use other publication means such as books and monographs to disseminate their work; it also does not allow consideration of the actual quality of the published material (other than as reflected in the quality of the journal). The U.K. study by Diamantopoulos, Schlegelmilch, and Neate-Stidson (1992), on the other hand, while taking a much more comprehensive view of publication outlets, reports publication rates at a rather aggregated level (e.g., "number of books written," "number of refereed articles published"), which again fails to make an explicit adjustment for quality. Given that the numerical quantity of research and publication is only one of many indicators of the research and writing productivity of university faculty (Moore and Taylor 1980), it is necessary that other measures also are considered alongside it. Citation counts and editorial review board memberships, for example, seem to be promising approaches that have not been widely used in the field of marketing. Moreover, there is considerable scope for improving the coverage of publication counts by using new sources, such as the Lambda Marketing Database developed in 1988 by Lancaster University (which covers a wide range of U.S. and European marketing-related journals).

Third, the majority of marketing studies on research performance measurement are based on raw output measures, making no attempt to adjust publication outputs in terms of inputs. A raw measure of output implies maximization, which could lead to the conclusion "turn out as many as possible in the shortest time as possible" (Landy and Farr 1983). To provide an accurate picture on research perfor-

mance differences of marketing departments, it is necessary to adjust research outputs according to the inputs (i.e. resources) used to produce them.

Finally, it is essential not only to develop comprehensive indicators of research performance, but also to determine which indicators are useful for which mission. In this context, attention also should be given to identifying key influences impinging on performance. According to Bean (1982), there are two sets of variables affecting research productivity: individual (i.e., sociodemographic and attitudinal characteristics) and institutional (i.e., characteristics of the working environment).

An investigation of the relative importance of these variables in affecting research performance would go a long way toward identifying what really makes a good researcher.

References


