The authors analyze the publications of four major marketing journals on the basis of their diversity relative to each other, against their mission statements, and over time. One important finding is that the journals that make no claim to diversity tend to be quite diverse, while the one that strives to be diverse does not seem to achieve its goal. A second major finding is that each of the four journals has a distinct character that is not necessarily the one intended by its mission or its editors. A third major finding is that these patterns are generally stable over time and tend to persist even in the face of efforts and pleas by its editors for change.

In Search of Diversity: The Record of Major Marketing Journals

Publications in the major marketing journals play a critical role in the discipline. They determine whether ideas and findings presented at conferences or in working papers are “true” or “valid.” Subsequently, these ideas and findings are integrated into textbooks for students of marketing. Furthermore, some key articles form a basis of instruction, while others form a basis for managerial practice. Thus, publications sanction what is considered “true knowledge” in the field. Publications also determine whether new academics will gain tenure at their early placements. Because of the importance of publications, researchers have examined the method and outcome of the publication process. We can classify this examination into two broad classes: normative accounts of what should be published and descriptive analysis of what actually gets published.

Normative papers on publishing in marketing have appeared through much of the discipline’s existence. In the 1940s and 1950s, authors expressed concern about the progress of marketing literature (see review by Kerin 1996). In the 1960s, papers debated the domain of the discipline (e.g., Bagozzi 1975; Ferber 1970; Kotler and Levy 1969). In the 1970s and early 1980s, the focus shifted to the appropriate methods of doing research (Hunt 1976; Zaltman, Pinson, and Angelmar 1973). In the last decade and a half, papers have emphasized the social and subjective aspects of the publication process (e.g., Anderson 1986). They debated whether published findings could be considered truth or whether objective truth exists (e.g., Anderson 1986; Hunt 1990; Peter and Olson 1983; Zinkhan and Hirschheim 1992). Because of the difficulty of ascertaining truth, some papers urged diversity in the criteria for evaluating papers (e.g., Anderson 1988; Muney and Fisk 1987). Many authors argued strongly for diversity in the very analysis of consumer and marketing phenomena (Brinberg and Hirschman 1986; Deshpandé 1983; Hirschman 1986; Hudson and Ozanne 1988).

Descriptive research, conversely, analyzed what was being published. An early article in the Journal of Marketing Research (JMR) (Goldman 1979) argued that the analysis of the citations of the articles of a journal provided a relatively unbiased measure for such study. Following this example, Leong and associates (Cote, Leong, and Cote 1991; Leong 1989, 1990) carried out citation analyses to describe the character of research in various journals. Zinkhan, Roth, and Saxton (1992) carried out a citation analysis of social science journals that showed that the Journal of Consumer Research (JCR) bridged the marketing and psychology literature. Hoffman and Holbrook (1993) did a citation analysis to show the relationships among and relative impact of researchers.

One area that descriptive papers have not addressed is the issue of diversity. This is all the more pertinent because recent normative papers have called on editors and reviewers to accept diverse viewpoints, approaches, and paradigms. This article addresses this issue of diversity. In particular, it tries to answer the following questions:

- Diversity: How diverse are the journal’s publications? Is its level of diversity consistent with its mission? How does the diversity of each journal compare with that of the others?
- Consistency over time: Has the journal’s diversity been stable over time? Have trends, if any, been away from or toward its mission?
IS DIVERSITY IMPORTANT?

In the political arena, diversity is equated with open-mindedness and freedom from bias. Lack of diversity on criteria of evaluation or admission is politically incorrect. Is diversity important in academic publishing? In this context, we define diversity as the extent to which a journal is open to publishing articles on a variety of topics, with each article adopting a variety of disciplinary perspectives.

One major argument against diversity is focus. Research requires in-depth treatment of issues. It requires the sustained efforts of researchers, sometimes for one or more generations. Flitting across topics or methods may hinder progress and an in-depth understanding of phenomena. The same argument holds for journals; to serve a discipline satisfactorily, they may have to focus on certain phenomena and favor certain methods over others. Kuhn (1962) suggested that such focus was the hallmark of normal science within a paradigm. A paradigm is a set of shared assumptions, goals, values, and methods for research among a group of researchers. Normal science is narrow paradigmatic research that follows accepted rules and focuses on solving well-defined puzzles. The focus of researchers in normal science could lead to much progress within a paradigm.

However, many authors argue strongly for diversity, especially for marketing phenomena, for three reasons. First, phenomena in marketing are multifaceted (Deshpandé 1983; Hirschman 1986; Hudson and Ozanne 1988). The eclectic nature of theories, methods, and data used in the discipline attests to this fact. As such, no single method of research fully captures any particular phenomenon. Thus, diversity in method is more likely to make for a rich understanding of marketing phenomena. For that reason, diversity is a founding principle of JCR and a frequent theme in editorials of many marketing journals.

Second, knowledge development seems to occur in cycles, with the initiation, growth, maturity, and then decline of paradigms (Kuhn 1962). The focus of researchers in normal science leads to much progress rapidly. Yet great insight can occur with the decline of an old paradigm and the birth of a new one (Kuhn 1962). The new paradigm, though rudimentary, can offer a fresh worldview with the potential of resolving problems that baffled the old paradigm. However, most members of the discipline, schooled in the old paradigm, resist the new paradigm. A narrow journal dedicated to one paradigm is likely to miss the path-breaking articles that launch a new paradigm. A diverse journal is likely to encourage original thinking that could foster a new paradigm.

Third, extensive research on a topic within one discipline slowly can resolve the problems of that discipline. However, as with most things in life, returns diminish with constant use of the same approach to solve problems. Sometimes a great breakthrough can occur using methods or principles from another discipline. In one sense, learning in another area can stimulate solutions in the original area. In another sense, progress can occur at the intersection of disciplines (e.g., Mahajan 1995). A journal that is diverse is more likely to stimulate such progress than one that is narrow.

Thus, the issue of diversity may be critical to progress within a discipline. For these reasons, many editors of marketing journals clearly indicate that they are open to all approaches and have no prior assumptions about suitable topics, methods, or theories, as long as the approaches have a valid link to the central focus of the journal. To the editor or the reviewers who deal with a variety of articles at a journal, the journal is likely to appear diverse. The key question is, how diverse are papers in a journal relative to its mission and to articles in related journals? A related issue is, how consistent has a journal's record of diversity been over time, especially given the efforts and styles of different editors? This article reports on three studies that were designed to answer these questions. The next three sections describe the three studies. The final section discusses implications of the research.

STUDY 1

This section presents the method, results, and limitations of the first study. The method section covers the measures, sampling, and procedure of Study 1.

Method

Measures. We measure diversity by a citation analysis of a journal's articles. Citation analysis involves identifying, classifying, and counting the sources of the cites of an article. Cites contain valuable information about the domain of the subject matter, theories, and methods of an article. Because citation analysis requires minimal subjective judgments by the researcher, it has been used frequently in the marketing literature (e.g., Cote, Leong, and Cote 1991; Goldman 1979; Hoffman and Holbrook 1993; Leong 1989, 1990; Zinkhan, Roth, and Saxton 1992). Based on our preceding definition of a journal's diversity, we use the following three indices of diversity:

- Histogram is a visual plot of the share of citations from each source. A diverse article or journal would have a wide histogram with a low share of citations from each source.
- Concentration is the sum of the share of citations from the top two, three, or four sources. A diverse article or journal would have a low concentration of citations.
- Breadth is the number of sources cited that have a share of citation greater than some minimal value such as 5% or 10%. A diverse article or journal would have a broad set of sources.

Sampling. The marketing discipline now contains a wealth of journals, some with a long history. We focus our analysis on four marketing journals: JCR, Journal of Marketing (JM), JMR, and Marketing Science (MKS). Our selection is not based on the premise that these are necessarily the four most important marketing journals, but merely that these four journals are a good representation of the concept of major marketing journals. For example, JM is the oldest marketing journal and, with JMR, often is ranked among the top ten business journals (Kerin 1996). JCR and MKS are the leading journals of two major interest groups in marketing: the Association of Consumer Research and the College of Marketing of the Institute For Operations Research and the Management Sciences (INFORMS). Thus, these four journals represent the quality and breadth of publications in marketing.

Two historical facts constrain the time frame of our study. First, JM went through a major change under the editorship

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1This institute was formed by a merger of the former Operations Research Society of America (ORSA) and The Institute of Management Sciences (TIMS).
of Jerry Wind in the late 1970s (Wind 1979). It settled into a steady pattern after that. Second, MKS started publication in 1982. To compare across the journals easily, we did not extend the study to issues in the 1970s and earlier. In addition, Study 1 includes issues only until 1992, the year this study began.

Our sampling of issues had four goals. First, we sampled on the basis of editorial tenure, because the journal’s editor may influence the character of a journal. Second, we avoided issues that overlapped the tenure of two editors. Third, we avoided special issues, which might skew the results. Fourth, we wanted a reasonable sample size. We first chose the two issues published exactly one and two years before the termination of each editor’s tenure. Then we chose the two issues that immediately followed these issues. We used these issues except (1) when the selected issue was a special one devoted to a single topic or (2) the editor served for less than two years. In the former case, we chose the issue immediately preceding the special issue. We encountered only one instance of the latter (Donald Morrison, editor of MKS for one year). All four issues published under his tenure were analyzed. With three editors per journal, this approach gave a total of twelve issues of each journal.

To handle the large number of articles more conveniently, we restricted the sample to half the articles in each issue. If the issue had an odd number of articles, we used one more than half the articles in that issue. We used a random number generator, calibrated to the number of articles in the issue, to select the articles randomly. This process led to a sampling of 223 articles.

Procedure. We first collected the cites of each article in the sample. We then identified the source of the cite. “Source” includes books or journals. We then classified the source by the discipline in which it appeared. The source discipline involves broad subjects of study in the social sciences, such as economics, sociology, and psychology, similar to those used by Leong (1989) and Zinkhan, Roth, and Saxton (1992). We then can assess a journal’s diversity by the extent to which these citations are drawn from different disciplines.

Results

Figure 1 shows a histogram of the share of cites of the journals to various source disciplines. Note from Figure 1 that all four histograms are similar, suggesting that the journals do not differ dramatically in diversity. But JM and JMR have histograms that are a little more flat and broad, suggesting that they source more diverse disciplines. JCR and MKS have steeper, narrower histograms, suggesting they source fewer disciplines. All four histograms suggest that the cites draw primarily from three or four sources, after which the histogram tends to flatten. As with a scree plot in factor analysis, the maximum information resides up to the point that the curve drops sharply and flattens. We calculate a concentration index or share of citations that occur at this point. A low concentration index suggests a diverse set of disciplines.

Table 1 presents this analysis of share of cites. It accentuates the differences among the journals. JMR, with the lowest concentration of cites, appears the most diverse of the four journals. JCR and MKS, with the highest concentration, appear the least diverse. These differences are significantly different.

A third index of diversity is the breadth of sources, or the number that contribute more than some minimal percentage of cites. Using 10% and 5% of the share of cites as alternate cutoffs yields the figures in Table 2. JMR has the largest number of sources, suggesting it is the most diverse journal. On both counts, JCR is near the bottom, suggesting it is less diverse.

Limitations

The results for JMR and JCR run surprisingly counter to their missions. The mission of the former is toward methodology, while that of the latter is toward diversity. However, before we can arrive at any firm conclusions, we must point out four limitations of this study. First, we did not use a measure of diversity with known properties based on a tradition of formal research. Second, we sampled only half the articles from a limited number of issues for a slightly earlier time period. Third, some disciplines, such as psychology, may have a large number of journals. Thus, even though JCR may seem to source narrowly at the discipline level, it may source a fairly wide set of journals. Fourth, because of sparse sampling of issues, we could not study trends in diversity over time.

STUDY 2

Study 2 tries to remedy the limitations of Study 1. It uses (1) established concentration indices (2) of source journals (rather than disciplines) (3) cited by all articles, which (4) enables temporal analysis. A source journal is the journal referred to in a citation. This section presents the method and results of Study 2.

Method

Measures. This study uses concentration indices to measure the diversity of a journal’s citations for three reasons. First, in the context of citation analysis, concentration is the opposite of diversity and suggests the degree to which a journal draws from a few sources. Second, researchers have studied extensively the concept of concentration in several contexts (see Table 3). Third, extensive research by numerous authors suggests two “appropriate” measures of concentration, the Herfindahl and the four-firm concentration index.

The appropriate properties for concentration measures and the “allowable” measures have been derived axiomatically in a classic article by Encaoua and Jacquemin (1980; see also Tirole 1988, pp. 221–22). Encaoua and Jacquemin (1980) note that for a concentration index, I, to be conceptually valid, it should satisfy three central conditions (which we translate to the journal diversity context):

1. The index must be symmetric between source disciplines. Thus, it should be invariant to permutations of citation shares between disciplines.
2. The index must fulfill the Lorenz condition that a mean-preserving spread increases I. A mean-preserving spread is a
Figure 1
HISTOGRAMS OF SHARE OF CITATIONS BY SOURCE DISCIPLINE

Table 1
SHARE OF CITES FROM TOP SOURCES OF EACH JOURNAL

<table>
<thead>
<tr>
<th></th>
<th>Journal</th>
<th>Test of Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>JCR</td>
<td>JM</td>
</tr>
<tr>
<td>Share of cites from top three sources</td>
<td>80%</td>
<td>76%</td>
</tr>
<tr>
<td>Share of cites from top four sources</td>
<td>83%</td>
<td>84%</td>
</tr>
</tbody>
</table>

further spread in the distribution of citation shares toward the tails of the distribution.

3. The concentration for symmetric disciplines must decrease when the number of disciplines grows from \( n \) to \( n + 1 \), as follows:

\[
\frac{1}{(1/n, \ldots, 1/n)} \geq \frac{1}{1/(n + 1), \ldots, 1/(n + 1)}.
\]

Two frequently used indices, the Herfindahl and the four-firm concentration index, satisfy these conditions. The four-firm concentration index, \( C_4 \), is a simple but popular
Table 2
NUMBER OF SOURCES WITH HIGH SHARE OF CITES

<table>
<thead>
<tr>
<th>Share of Cites</th>
<th>Journal</th>
<th>Test of Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>JCR</td>
<td>JM</td>
</tr>
<tr>
<td>&gt; 5%</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>&gt;10%</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 3
USE OF CONCENTRATION MEASURES IN VARIOUS RESEARCH CONTEXTS

<table>
<thead>
<tr>
<th>Research Context</th>
<th>Representative Studies or Review Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product diversity within firms</td>
<td>Bunker et al. 1996; Gollop and Monahan 1991</td>
</tr>
<tr>
<td>Publication patterns among researchers</td>
<td>Scott and Mitias 1996</td>
</tr>
<tr>
<td>Economic diversity within geographical areas</td>
<td>Seigel, Johnson, and Alwag 1995; Tauer 1992</td>
</tr>
<tr>
<td>Market diversification among firms</td>
<td>Chatterjee and Blücher 1992; Haveman 1992</td>
</tr>
<tr>
<td>Concentration of market power</td>
<td>Del Monte 1992; Tirole 1988</td>
</tr>
</tbody>
</table>

An economic measure of concentration. It is the sum of the market shares of the four largest firms in an industry. Adapted to the context of citation diversity, the measure becomes the four-source concentration index:

\[ C_4 = \sum_{i=1}^{4} \alpha_i \]

where \( \alpha_1, \ldots, \alpha_4 \) are the percentage shares of the top four sources of a journal’s citations. Note that \( C_4 \) is a linear measure; it does not differentiate among journals with highly skewed citation patterns (e.g., citation shares of 70%, 6%, 2%, and 2%) relative to journals with uniform citation patterns across disciplines (e.g., citation shares of 4 × 20%).

The Herfindahl index is mathematically expressed as follows:

\[ C_H = \sum_{i=1}^{4} \alpha_i^2 \]

The square term in the Herfindahl index causes it to weight disciplines with large citation shares more than disciplines with smaller citation shares. Thus, it is sensitive to skewed shares, as in the preceding example, overcoming one problem with the four-source concentration index (e.g., Amato 1995; Kwoka 1985; Shy 1995). This index is the most commonly used index of concentration. We present results using both these concentration indices, \( C_4 \) and \( C_H \).

Sampling and procedure. We use the same four journals that we did in Study 1. However, for this study, we used all the articles of all the issues of the journals for an extended period of 1979 to 1995. We obtained the cites of a citing journal from the Journal Citation Report for the Social Sciences Citation Index. For each citing journal for each year, the report lists the source (or cited) journal with the number of times it was cited in that year. The report publishes citations only for journals that were cited at least six times in a year by a citing journal. We included cites of all articles of all issues in these journals from 1982 to 1995, the last full year for which data was available. The Journal Citation Report began including MKS as a citing journal only since 1989. So, we computed the cites for that journal manually for the 1982 to 1988 time period. Once we had collected all the citations, we computed the concentration indices, as previously explained. For Study 2, we carry out the entire analysis by source journal (and not by source discipline, as in Study 1).

Results
We present the results first on the issue of total diversity and then on patterns over time.

Total diversity. Table 4 provides the summary results on journal diversity, based on the two new measures of concentration. The most salient result is the close similarity in the concentration indices across journals. In terms of the Herfindahl index, JM is the most diverse, with a \( C_H \) value of 207. JCR, MKS, and JMR follow with indices of 263, 342, and 355, respectively. JCR, MKS, and JMR follow with indices of 263, 342, and 355, respectively. The pattern of differences is a little more pronounced using share of citations due to top four sources. JM is again the most diverse, and MKS is the least diverse.

Table 5 presents a list of the top ten sources cited by each journal. Note the great similarity in sources, especially higher up in the order, across all four journals. However, Table 5 also shows how JM and JMR have the most diverse draws in terms of source journals that belong to relatively different disciplines. At the same time, the disparity in sources cited is strongest between MKS and JCR, supporting the idea that these two are more specialized journals. JCR seems to draw more heavily from the psychological journals, while MKS draws more heavily from the economics and operations research journals. Although MKS’s draw is consistent with its charter, JCR’s draw is inconsistent with its charter. JCR’s charter clearly directs it to be interdisciplinary, being spon-

Table 4
CONCENTRATION BY SOURCE JOURNAL

<table>
<thead>
<tr>
<th>Measure</th>
<th>JCR</th>
<th>JMR</th>
<th>JM</th>
<th>MKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>( C_H )</td>
<td>263</td>
<td>355</td>
<td>207</td>
<td>342</td>
</tr>
<tr>
<td>( C_4 )</td>
<td>27</td>
<td>29</td>
<td>24</td>
<td>31</td>
</tr>
</tbody>
</table>

Note: Higher values of \( C_H \) and \( C_4 \) indicate higher concentration (lower diversity).
sored equally by several social science organizations, including the American Economic Association and the Society for Personality and Social Psychology. In this sense, the results of Study 2 are consistent with those of Study 1, which indicate that JCR’s cites were concentrated on a set of three disciplines.

Pattern over time. The results for JCR may come as a surprise because, of the four journals, it is the only one that is committed to the goal of diversity. However, a close analysis of its editorial indicates that its editors were aware of this problem (though in an absolute sense only, not relative to other journals) and appealed to authors to remedy it (Bettman and Kassarjian 1982, 1983; Ferber 1977; Lutz 1986; Monroe 1993). Moreover, an analysis of the content of the journal indicates that especially since the mid-1980s, it began a move toward naturalistic and other methods of inquiry that could have resulted in greater diversity. So, a relevant question is whether this pattern of diversity holds over time.

An analysis of diversity on an annual basis suggests that the overall results may mask some important, albeit modest, trends. Figures 2 and 3 represent yearly trends in journal diversity, using the Herfindahl and share of the top four sources, respectively. The figures show that JCR, MKS, and JM became less diverse over time. Indeed, based on the Herfindahl index, JCR, which was the most diverse of the four journals in the late 1970s, turned out to be the most concentrated of the four journals by 1994. MKS shows some fluctuations as authors and editors sought to develop a clear niche for the journal. In contrast, based on the Herfindahl index, the diversity of JMR has been quite steady. Table 6, Parts A and B, presents the results from a regression of the indices of diversity on time as an independent variable. The standardized coefficients of time for each journal suggests that JCR, MKS, and JM became more concentrated over time, though the trends are slightly smaller for JM and MKS. Ironically, the editors of JCR tried to make the journal more diverse.

**STUDY 3**

We report the findings of a third study that throws further light on these issues. This study was a content analysis of articles in the journals. The content analysis enables comparisons on key dimensions on which the journals could differ. Two such dimensions are the source of data in empirical articles, whether laboratory or field, and the method of argument in theoretical articles, whether verbal or mathematical. We hypothesized that if a journal (such as JCR) were chartered to be interdisciplinary and published articles that adopted the vastly different paradigms of its sponsoring disciplines, then it would use a variety of data and theoretical approaches. However, journals such as JMR and MKS, which explicitly state that they are methodological or quantitative in orientation, respectively, would focus on specific approaches to collecting data or developing theory. For this analysis, we used the same sampling frame as in the first study, with the change that we analyzed the content of all articles in the sampled issues. We then classified the empirical articles by data source and the theoretical articles by method of argument (see the Appendix). We use the guidelines provided by Kassarjian (1977) and operationalized by Kolbe and Burnett (1991) as the basis for the content analysis.

To minimize subjectivity, two raters acted as independent judges of each article. To increase the judges’ familiarity with the coding scheme, we first conducted a trial coding session using a set of articles that were not included in this study. We also pretested and refined the definitions of the categories and subcategories during this trial session. Inter-rater reliability between the two judges was 88%. This figure compares favorably with the 85% figure suggested by Kassarjian (1977) for a reliable content analysis. Disputed

<table>
<thead>
<tr>
<th>Rank</th>
<th>JCR</th>
<th>JMR</th>
<th>JM</th>
<th>MKS</th>
<th>Cumulative Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>JCR</td>
<td>JMR</td>
<td>JM</td>
<td>JMR</td>
<td>10%</td>
</tr>
<tr>
<td>2</td>
<td>JMR</td>
<td>JCR</td>
<td>JMR</td>
<td>MKS</td>
<td>18%</td>
</tr>
<tr>
<td>3</td>
<td>Advances in Consumer Research</td>
<td>JMR</td>
<td>JCR</td>
<td>Management Science</td>
<td>10%</td>
</tr>
<tr>
<td>5</td>
<td>JMR</td>
<td>MKS</td>
<td>Management Science</td>
<td>JCR</td>
<td>25%</td>
</tr>
<tr>
<td>6</td>
<td>Psychological Review</td>
<td>Psychometrika</td>
<td>Advances in Consumer Research</td>
<td>Econometrika</td>
<td>26%</td>
</tr>
<tr>
<td>7</td>
<td>Psychological Bulletin</td>
<td>Advances in Consumer Research</td>
<td>Administrative Science Quarterly</td>
<td>Operations Research</td>
<td>27%</td>
</tr>
</tbody>
</table>
articles were referred to a third rater, who reclassified them to either one of the two disputed dimensions or to a third, different dimension. The first two raters were doctoral students in marketing, and the third rater was a full professor, who at various times has served on the editorial review boards of three of the four journals.

**Results**

The classification of articles by field or laboratory data shows some sharp differences among the journals (see Table 7 and Figure 4). Of the four journals, *JMR* is the most balanced in its emphasis on lab versus field data. *JM*, and to a lesser extent *MKS*, overwhelmingly employs field data. This finding may reflect the orientation of *JM* and *MKS* toward managers, for whom external validity is a great concern. In contrast, *JCR* strongly favors laboratory data (the difference is statistically significant). Also, *JCR* is the only one of the four journals that publishes more laboratory-based than field-based studies. This finding is consistent with the emphasis by authors of the journal on internal validity (Calder, Phillips, and Tybout 1981; Greenberg and Folger 1988). Another reason for the dominance of the laboratory experiments in *JCR* may be the dominance of the cognitive psychology paradigm, which favors the laboratory approach (Wind 1977; Bettman and Kassarjian 1982, 1983; Monroe 1990, 1993). Consistent with trends found in Study 2, we found that the concentration of articles using laboratory experiments went up from 36% in 1980–81 to 58% in 1989–90.

The classification of theory articles by the use of verbal versus mathematical logic also shows sharp differences across journals. All the sampled theoretical articles in *MKS* employ mathematical logic. This pattern is consistent with the paradigmatic foundations of the journal, which was launched as quantitative and is sponsored by a quantitative organization, INFORMS (e.g., Sen 1983, 1988). Conversely, far more articles in *JM* and *JCR* use verbal rather than mathematical logic. This use of verbal logic may render *JM* more accessible to managers, as envisioned by its charter. However, the predominance of verbal logic in *JCR* is not necessarily consistent with its mission. *JCR* is equally sponsored by several parent disciplines, including quantitatively oriented disciplines such as the American Statistical Association, INFORMS, and the American Economic Association.

**DISCUSSION**

One of the most important findings of this article is that *JCR*, which strives to be diverse, appears not to achieve its goal, while *JMR*, which was chartered to be methodological, appears quite diverse. This conclusion is supported by mul-
Figure 3
TRENDS IN CONCENTRATION BY SOURCE JOURNAL (C₄)

Table 6
ESTIMATION OF TRENDS OVER TIME

<table>
<thead>
<tr>
<th>Part A: Regression of Herfindahl Index on Time by Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCR</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Time in years*</td>
</tr>
<tr>
<td>R²</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part B: Regression of Share of Top Four Sources on Time by Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCR</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>Time in years*</td>
</tr>
<tr>
<td>R²</td>
</tr>
</tbody>
</table>

*All coefficients are standardized values. Numbers in parentheses indicate absolute t values.

Table 7
TYPE OF DATA AND THEORY USED IN JOURNALS

<table>
<thead>
<tr>
<th>Part A: Percentage of Articles Using Lab Versus Field Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal Category</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>JCR</td>
</tr>
<tr>
<td>JMR</td>
</tr>
<tr>
<td>JM</td>
</tr>
<tr>
<td>MKS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part B: Percentage of Articles Using Math Versus Verbal Logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal Category</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>JCR</td>
</tr>
<tr>
<td>JMR</td>
</tr>
<tr>
<td>JM</td>
</tr>
<tr>
<td>MKS</td>
</tr>
</tbody>
</table>

multiple studies, multiple measures of diversity, and two classes of cites (journals and disciplines), analyzed within and across articles. The findings are especially surprising for JCR, which is chartered as an interdisciplinary journal, sponsored by diverse organizations, and governed by representatives of these organizations. The diversity of these journals seems deeply ingrained in their structure because it is relatively stable over time and persists, despite editorial efforts to the contrary.

These findings raise two questions: Were the journal’s subscribers and editors aware of this state of affairs? Why has it happened? Subscribers seemed surprised by these findings. Informal surveys of subscribers at our presentation at national and regional conferences indicated an over...
The overwhelming belief that *JCR* was the most diverse, while *JMR*, and especially *MKS*, was the most focused. Many subscribers held on to that belief, even in the face of our results, arguing that our measures were faulty. However, many editorials indicate that editors were aware of the problem and would support our findings. For example, prior editorials of *JCR* indicate that editors were aware of the lack of diversity of that journal, relative to its mission (but not relative to other journals). As far back as 1977, Jerry Wind, chair of the *JCR* Policy Board, remarked that "published *JCR* articles suggest that most of them are heavily oriented toward marketing and, to a lesser extent, toward social psychology" (Wind 1977, p. 59). Statements by subsequent editors of *JCR* echo similar sentiments. Similarly, editorials in *JMR* indicate that editors were aware that the journal had a broader appeal than its narrowly defined charter (Davidson 1964), which they tended to endorse (Mahajan 1995; Weitz 1992; Winer 1998).

The answer to the question about the reason for this state of affairs is not quite clear. Two editors of *JCR* suggest that it is due to the pattern of submissions: "Currently, many of the manuscripts have an information processing or marketing orientation. We receive few papers with an economic, sociological, anthropological or modeling slant" (Bettman and Kassarjian 1982). An editor of *JMR* emphasizes the important role of authors in defining the nature of a journal (Mahajan 1995). However, one editor clearly attributes the concentration of *JCR* publications to the growth and dominance of a single paradigm within the field: "Experimentation is the dominant methodology reported in *JCR*. Finally, psychology has become the dominant disciplinary basis for consumer research" (Monroe 1990, p. 4). Table 5 supports this statement. The growth and dominance of a paradigm within a field may be due to its success in solving problems or the power and influence of its adherents (Kuhn 1962).

A second important finding is the occurrence of key trends over time. Diversity decreases a little in *JMR*. More striking is the decrease in diversity in *JCR*. This trend occurs despite strong and repeated pleas by the editors for the contrary. In general, the appeals of the editors do not appear to be particularly effective. Patterns occur at journals despite the editors' appeals to the contrary. Another example is the relatively low level of empirical research at *MKS*, despite one editor's repeated call for more empirical research. The most notable example is the central position of *JMR*, despite its methodological charter.

This phenomenon can be explained by Kuhn's (1962) description of the progress of normal science. Normal science is focused research that contributes to steady, solid progress within a paradigm. Laboratory studies of consumers' information processing and mathematical models of firm behavior are examples of such research in *JCR* and *MKS*, respectively. The paradigmatic orientation of these two journals is evident also from Table 5. Outside marketing, the highest number of cites of *JCR* tend to be in psychology, while the highest number of cites of *MKS* are in economics. Neither of these affiliations is mandated in the mission of these journals.
Authors are attracted to a journal by the content of its articles. Authors who already have published articles in a journal are likely to be invited to review for the journal. Editors are loath to reject good submissions, even when they run counter to their vision or the journal's mission (e.g., Lutz 1986). As a result, the journals publish more of the traditional articles, even though the editors call for a change. The body of scholars who communicate with each other through the pages of the journal probably has a more profound influence on the content of the journal than the mission statements or editorial appeals do.

Two editorial strategies may help overcome this momentum of scholarly pursuits. First, the editor could choose an editorial board and reviewers who better represent the direction in which the journal should go. Second, the editor could call for special issues targeted at topics or methods in which a journal is wanting (Day 1996). These strategies could be analyzed for effectiveness based on the past history of the journals.

A third major finding from this study is that each of the four journals has a distinct character. This character is not one that is necessarily expounded by editors or written in the charter of these journals. Editors state that they want to publish the "highest quality" articles in the area, without explicit criteria for the logic of the theory, the source of the data, or the type of method. Despite the similarity in this overall goal and the danger of overlap, as one editor realizes (Weitz 1992), over time the journals have evolved to be not similar but quite different from each other. Based on articles published, we found two dimensions on which the journals show sharp differences: the use of field versus laboratory data and the use of verbal versus mathematical logic in developing theory. Figure 4 classifies the four journals based on the proportion of articles published on these two dimensions. It shows the differences among the four journals. JM stands out for publishing articles that use mainly verbal logic and field data. Although articles of JCR also rely heavily on verbal logic, they predominantly use laboratory data. In contrast, articles in MKS use mainly mathematical logic and field data.

The use of field versus laboratory data and of verbal versus mathematical logic are issues that are not accidental but central to the core beliefs of researchers and rooted in the paradigms in which they work. Researchers long have debated the merits of each alternate approach (e.g., Bass 1993; Calder, Phillips, and Tybout 1981, 1983; Hauser 1985; Hirschman 1986; Lynch 1982, 1983). Thus, the differences among the journals on these dimensions reflect deep paradigmatic differences. Overall, the sharp, stable differences among the journals indicate that they have developed distinct characters and have matured to occupy distinct niches in the publication space in marketing. Indeed, character itself may explain the differences in diversity across journals.

Figure 4 also shows that JMR holds a unique place among the four journals, closest to the center of the two-dimensional space defined by method of data collection and theory development. This suggests that, despite its methodological charter, the journal has evolved to become the broadest outlet for publications in marketing, without allegiance to any paradigm for data collection, theory development, or topical specialty. As a result, the journal has become the prototypical journal for high-quality marketing publications.

Our study has many limitations. First, we did not have access to the articles submitted to each journal, which could indicate to what extent our observations are a result of submissions. Second, we did not analyze the journals’ editorial review boards or contact authors or reviewers to ascertain structural or perceived biases in the review process. Third, we did not analyze how the start of JCR, MKS, and other journals affected diversity at JM and JMR. Fourth, we did not verify to what extent diversity at these or other journals has led to novel or path-breaking articles. These are all good topics for future research.

APPENDIX

Classification Method Used in Study 3

We first classified each article as theoretical, empirical, or methodology. We then classified it into subcategories. The definitions for the various categories and subcategories follow:

Theoretical articles are those that primarily develop, analyze, or describe theories that explain marketing phenomena. We define a theory as a systematically developed explanation for an empirical phenomenon. We classify theoretical articles as using either mathematical or verbal logic. A theory that uses mathematical logic is one in which the crux of the explanation is expounded by equations. A theory that uses verbal logic is one in which the crux of the explanation is developed through verbal arguments.

Empirical articles are those that primarily deal with the description or analyses of phenomena. Empirical articles can be classified into two types based on the source of the data: laboratory or field. A laboratory study is a controlled environment that does not occur naturally but allows the researcher to observe or make inferences about the causes of a phenomenon. A field study is one in which the data relating to the phenomenon are drawn from the natural environment in which the phenomenon normally occurs. Articles that combine both field and experimental were rare. They would count equally to both categories and are thus excluded. Meta-analysis articles are classified as either field or laboratory, depending on whether the articles they covered were primarily field or laboratory.

A methodological article is one that primarily develops or describes a procedure for conducting research, managing products, or evaluating research. Methodological articles sometimes contain a theoretical rationale for the method or a practical illustration of it. However, the thrust of such articles is primarily on the exposition of the procedure and not on the theory or illustration.

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**Figure X: Latent Growth Curve Model**

Chi sq.=15.99 P=0.08 CFI=0.96 RMSEA=0.03

- Imports SPSS files
- Comprehensive data manager
- Normal, elliptical, and ADF statistics
- Corrected statistics for nonnormal data (Robust ML, with Satorra-Bentler test; Yuan-Bentler finite sample ADF)
- Multi-sample analysis
- Analysis of means & covariances
- Polyserial/polychoric correlations
- Missing value diagnosis and imputations
- Multivariate LM test
- Basic statistics (t tests, ANOVA, regression, factor analysis...)
- Data exploration plots (line, area, normal probability, scatter, box...)
- RETEST for faster convergence
- Effect decomposition
- New automatic statistical summary for bootstrap and simulations

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