## Benchmarking Scholarship in Consumer Research: The p-Index of Thought Leadership

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#### Abstract

The assessment of consumer scholarship must move beyond a mere counting of the number of "A"s on a researcher's CV to include at least some measure of impact. To facilitate a broader assessment of scholarship in consumer research, we provide detailed statistics on the productivity and citation impact of the main gatekeepers of the field: the 340 editors, associate editors, and editorial board members of *JCR* and *JCP*. In addition, we introduce a new metric, called the *p*-index, which can be interpreted as an indicator of thought leadership. Using this metric, we show that productivity and thought leadership do not necessarily go hand in hand in consumer research and that a combination of the two is a good predictor of the level of esteem that consumer scholars enjoy among their peers and of the receipt of major career awards. Our analyses provide greater transparency into how productivity, citation impact, and overall thought leadership are currently distributed among prominent consumer scholars. Furthermore, the detailed descriptive statistics reported can serve as useful benchmarks against which other consumer researchers' records may be meaningfully compared.

Keywords: Consumer research; Scientometric; Impact; Relevance; Thought leadership; Scholarship

As *JCR* celebrates its 50<sup>th</sup> anniversary, it is useful to reflect on how scholarship is assessed within our field. By far, the most common metric for gauging scholarship in consumer research (and in marketing as a whole) is the number of "A-level" articles that researchers have published. The pervasive use of this metric as a primary yardstick by which scholars are evaluated within our field is understandable: It is an objective measure of research productivity; and to the extent that publication in top-level journals is highly selective, it is also a reasonable indicator of the quality of the researcher's work. Moreover, it is simple and transparent and can easily be compared across researchers through a brief review of the CVs.

Yet, a simple count of the number of A's is clearly a reductionist way of judging a record of scholarship. The fact that a given article is published by a major journal, while suggestive of a certain level of "quality," as determined by the journal's review team, does not guarantee that this paper is actually a "good" based on general epistemic criteria such as generalizability, relevance, and insight (see Pham [2023], for a suggested list of epistemic criteria). Nor does a publication in a major journal guarantee that the paper has a significant "impact," however impact is defined. Another concern is that overemphasis on the number of A's as the primary metric of researcher evaluation encourages the pursuit of research that is methodologically tight but substantively and theoretically narrow, because this type of research has a better chance of surviving the rigor of our top journals' review process (Pham 2013).

The purpose of this paper is to promote and facilitate a broader assessment of scholarship in consumer research: one that is less narrowly fixated on a mere counting of the number of A's and more sensitive to evidence of scholarly impact, using citations as a basic measure of impact. To this end, we perform a scientometric study of the publication records of a large and important sample of consumer scholars: the current editors, associate editors (AEs), and editorial review

board (ERB) members of *JCR* and the *Journal of Consumer Psychology (JCP)*, who are the primary gatekeepers of the field. These scholars' records are examined across a broad range of standard productivity and citation metrics such as the number of A's, the total number of citations, and the *h*-index. In addition, we propose a new citation metric, called the *p*-index, which can be seen as an indicator of a researcher's propensity for thought leadership. We show that this measure has desirable properties and has significant predictive validity as a complementary indicator of overall scholarship.

Our findings paint a more complete picture of the distribution of scholarship among a distinguished set of consumer scholars. This picture makes two kinds of contributions. From a "lay-of-the-land" perspective, our results provide a more balanced appreciation of these consumer scholars' respective contributions to knowledge, one that is less dominated by sheer productivity in terms of number of A's. For example, we recognize scholars whose citation impact has been outstanding even though they may not have published as many A-level articles as other researchers. Conversely, we show that consumer researchers can assemble impressive resumés with publications that consistently fail to attract significant attention, thereby documenting the importance of going beyond the simple counting of A's when evaluating consumer scholars. Through the *p*-index, we identify scholars with a sustained ability to attract other scholars' interest in their work, which is an indicator of thought leadership.

From a forward-looking perspective, the detailed descriptive statistics and the new index presented in this article serve as useful benchmarks against which other consumer researchers' records may be meaningfully compared. For example, an *h*-index of less than 8 would place a researcher's record below the  $25^{\text{th}}$  percentile of the editorial board members of *JCR* and *JCP*, whereas an *h*-index of more than 20 would place a researcher's record above the  $75^{\text{th}}$  percentile.

Similarly, a *p*-index of less than 41% would place a researcher's record below the 25<sup>th</sup> percentile of the editorial board members of *JCR* and *JCP*, whereas a *p*-index above 69% would place a researcher's record above the 90<sup>th</sup> percentile. Such benchmarks should facilitate the evaluation of scholarship in the field at a high level (a more precise evaluation would, of course, require a careful reading of the work). More generally, we hope that by sensitizing the field to a more multidimensional view of consumer scholarship that explicitly recognizes at least some dimensions of impact and thought leadership, this paper will encourage consumer scholars, present and future, to care more about the impact potential of their research than the mere publishability of their papers in major journals.

#### A SCIENTOMETRIC STUDY OF CONSUMER SCHOLARS

Our analysis focuses on an objective sample of consumer scholars of high relevance to the field: the 340 current (as of January 2022) editors, associate editors (AEs), and editorial review board members of *JCR* and *JCP* (hereafter, the "JCR/JCP editorial boards"). This sample encompasses a broad range of active consumer researchers of different levels of seniority (Web Appendix [WA] 1 for descriptive statistics). While this selective sample is clearly not representative of all consumer researchers, it nonetheless offers useful benchmarks for assessing any consumer researcher's record. Moreover, as the primary gatekeepers of the field's major publication outlets, this set of researchers is a population worthy of study in itself.

We compiled these scholars' research records by cross-referencing their publicly available CVs with the Web of Science's (WoS) Social Science Citation Index database. This database was preferred over Google Scholar because it is generally considered to be a more reliable source of bibliometric data (Martin-Martin et al. 2018). In early 2022, we assembled a comprehensive dataset of all journal articles published by this group of researchers in outlets indexed by WoS. Publications not indexed by WoS were excluded from the analyses. We further

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excluded conference proceedings papers, book chapters, short editorial notes, tutorials,

rejoinders, and corrections/errata. This resulted in a dataset of 8,552 relevant articles across the 340 researchers (M = 25.15 articles per researcher). For each article, we recorded (a) the journal in which it was published; (b) whether the journal is a "top four" marketing journal (*JCR, JMR, Journal of Marketing, Marketing Science*) or *JCP*, which we included as a top publication given our focus on consumer research (hereafter, we refer to this set of five journals as "top marketing publications"); (c) the year of publication; (d) the number of authors and the researcher's position on the author list; (e) the total number of WoS citations to date (as of January–March 2022); and (f) the rank of the article in terms of citations compared to other articles published by the same journal that year. These data were used to compute multiple measures of productivity and citation-based impact for each researcher, as detailed in subsequent sections.

In addition to these article-level measures, we collected several researcher-level measures such as (a) the year of PhD (to account for seniority effects); (b) the current university affiliation; and (c) the current professional rank (e.g., associate professor, chaired professor). The measures included the result of a brief survey conducted in March 2020 in which members of the *JCR* and *JCP* editorial boards were asked to identify "five scholars (excluding yourself) from the broader pool of consumer researchers who are still active...whose scholarly work you most admire...independent of their seniority and your personal affinity with them." Of the 289 editorial board members contacted, 157 (54.3%) provided usable responses to this question. The number of times that a researcher was mentioned in response to this question was used as a measure of peer esteem that served as an independent criterion for testing the predictive validity of the various productivity and impact metrics.

We next report an analysis of the sampled scholars' productivity and impact along

standard citation metrics and identify some limitations of these metrics. We then introduce the *p*-index and test its reliability and validity as an additional indicator of scholarship and impact, before assessing our sample of scholars on this new metric. We conclude with thoughts on the future assessment of consumer scholarship.

#### THE PRODUCTIVITY OF CONSUMER SCHOLARS

#### Productivity Measures

We computed three basic measures of productivity for each researcher: (1) the total number of publications in WoS-indexed outlets (QT, for "quantity total"); (2) the number of top marketing publications (QM5, for "quantity top-5 marketing"); and (3) the number of JCR publications (QJCR, for "quantity JCR"). Two versions of each productivity measure were tabulated. The first was the raw, *unadjusted* productivity score (QT, QM5, or QJCR) in which authors are given full credit for every article they published, regardless of the number of coauthors and their authorship position. In a second version of the measures, authors received only fractional credit for any co-authored publication. Given that it is customary in consumer research to list authors in decreasing order of their respective contributions to the article, each co-authored publication was credited to researchers using the following formula (Abass 2011):  $W = \frac{2(n-a+1)}{n(n+1)}$ , where *n* is the total number of co-authors on the article, and *a* is the researcher's authorship rank. For instance, a solo-author article would be weighed 1, whereas a four-author article in which the researcher is the third author would receive a weight of 0.20. These authorship-adjusted scores are denoted OWQT, OWQM5, and OWQJCR (OW, for "order-weighted"). (An alternative approach would be to assume equal authorship for all co-authored articles and credit each publication by a fraction equal to 1/n. This approach would be more suitable in fields like economics where the order of authorship is purely alphabetical.)

#### Productivity Results

Table 1 presents summary statistics for our sample on each version of the productivity

metrics. In addition to the mean and standard deviation, the table provides the minimum and

| 1          |                        |          | Table 1                   | L. JCR | /JCP ERB Member       | s' Pro | oductivity Metri          | cs (N =  | = 340)                     |    |                    |          |
|------------|------------------------|----------|---------------------------|--------|-----------------------|--------|---------------------------|----------|----------------------------|----|--------------------|----------|
|            |                        |          | Authorship-adju           | sted   |                       |        | Authorship-adju           | usted    | -                          |    | Authorship-adju    | sted     |
|            | Total Number of        | of       | Number of Public          | ations | Number of Top Mark    | eting  | Number of Top Ma          | arketing | Number of JCR              |    | Number of JCR Publ | ications |
| Statistics | Publications (Q        | (T)      | (OWQT)                    |        | Publications (QM      | 5)     | Publications (OW          | /QM5)    | Publications (QJC          | R) | (OWQJCR)           |          |
| Mean       | 25.11                  |          | 9.93                      |        | 11.58                 | -1     | 4.97                      | 2        | 5.58                       |    | 2.53               |          |
| S.D.       | 23.56                  |          | 8.34                      |        | 9.10                  |        | 3.88                      |          | 4.54                       |    | 2.18               |          |
| Skewness   | 4.32                   |          | 3.26                      |        | 2.04                  |        | 1.92                      |          | 2.30                       |    | 2.65               |          |
|            |                        |          |                           |        |                       |        |                           |          |                            |    |                    |          |
| Max        | 230.00                 |          | 68.00                     |        | 56.00                 |        | 23.83                     |          | 35.00                      |    | 16.83              |          |
| 0.90       | 47.90                  |          | 18.91                     |        | 24.00                 |        | 9.53                      |          | 11.00                      |    | 4.80               |          |
| 0.75       | 31.00                  |          | 12.10                     |        | 15.00                 |        | 6.40                      |          | 7.00                       |    | 3.33               |          |
| 0.50       | 19.00                  |          | 7.63                      |        | 9.00                  |        | 3.87                      |          | 4.00                       |    | 2.00               |          |
| 0.25       | 12.00                  |          | 5.01                      |        | 5.00                  |        | 2.30                      |          | 3.00                       |    | 1.08               |          |
| 0.10       | 8.00                   |          | 3.33                      |        | 3.00                  |        | 1.30                      |          | 1.00                       |    | 0.61               |          |
| Min        | 1.00                   |          | 0.33                      |        | 1.00                  |        | 0.33                      |          | 1.00                       |    | 0.10               |          |
|            |                        |          |                           |        | Top-109               | % scho | lars                      |          |                            |    |                    |          |
|            | QT                     |          | OWQT                      |        | QM5                   |        | OWQM5                     |          | QJCR                       |    | OWQJCR             |          |
|            | Petty, R.              | 230      | Schwarz, N.               | 68.0   | Lehmann, D. R.        | 56     | Krishna, A.               | 23.8     | Janiszewski, C.            | 35 | Belk, R. W.        | 16.8     |
|            | Schwarz, N.            | 208      | Petty, R.                 | 65.1   | Dahl, D. W.           | 56     | Janiszewski, C.           | 21.4     | Belk, R. W.                | 29 | Janiszewski, C.    | 15.0     |
|            | Vohs, K.               | 137      | Belk, R. W.               | 54.4   | Krishna, A.           | 52     | Simonson, I.              | 21.2     | Lynch, J.                  | 22 | Thompson, C.       | 12.3     |
|            | Lehmann, D. R.         | 121      | Hill, R.                  | 50.4   | Janiszewski, C.       | 51     | Chernev, A.               | 20.5     | Bettman, J. R.             | 21 | Chernev, A.        | 12.2     |
|            | Belk, R. W.            | 109      | Lehmann, D. R.            | 41.5   | Dhar, R.              | 47     | Bettman, J. R.            | 19.6     | Thompson, C.               | 21 | Bettman, J. R.     | 10.0     |
|            | Hill, R.               | 99       | Vohs, K.                  | 37.5   | Bettman, J. R.        | 44     | Lehmann, D. R.            | 19.4     | Dahl, D. W.                | 19 | Lynch, J.          | 9.5      |
|            | Rucker, D. D.          | 87       | Krishna, A.               | 33.1   | Simonson, I.          | 44     | Belk, R. W.               | 18.8     | Krishna, A.                | 18 | Richins, M.        | 9.0      |
|            | Dahl, D. W.            | 78       | Bettman, J. R.            | 32.5   | Inman, J. J.          | 38     | Dhar, R.                  | 17.4     | Berger, J.                 | 18 | Berger, J.         | 8.0      |
|            | Bettman, J. R.         | 74       | Arnould, E. J.            | 32.4   | Lynch, J.             | 34     | Dahl, D. W.               | 16.1     | Kahn, B.                   | 17 | Pham, M. T.        | 7.7      |
|            | Krishna, A.            | 74       | Rucker, D. D.             | 28.0   | Berger, J.            | 33     | Berger, J.                | 14.9     | Shiv, B.                   | 17 | Krishna, A.        | 7.2      |
|            | Netemeyer, R. G.       | 72       | Simonson, I.              | 27.7   | Roedder John, D.      | 33     | Inman, J. J.              | 14.5     | Dhar, R.                   | 16 | Kahn, B.           | 7.2      |
|            | Tormala, Z.            | 66       | Berger, J.                | 24.4   | Alba, J. W.           | 32     | Alba, J. W.               | 14.3     | Pham, M. T.                | 16 | Simonson, I.       | 7.2      |
|            | Kardes, F. R.          | 64       | Russell, C.               | 24.4   | Belk, R. W.           | 31     | Lynch, J.                 | 14.1     | Johar, G. V.               | 16 | Mick, D. G.        | 6.8      |
|            | Dhar, R.               | 61       | Janiszewski, C.           | 24.1   | Kahn, B.              | 31     | Thompson, C.              | 13.8     | Lehmann, D. R.             | 15 | Roedder John, D.   | 6.8      |
|            | Huber, J.              | 60       | lacobucci, D.             | 24.0   | Morwitz, V. G.        | 30     | Roedder John, D.          | 13.7     | Roedder John, D.           | 15 | Peracchio, L.      | 6.6      |
|            | Hoyer, W. D.           | 59       | Dahl, D. W.               | 24.0   | Kardes, F. R.         | 29     | Pham, M. T.               | 13.5     | Sengupta, J.               | 15 | Shiv, B.           | 6.4      |
|            | Janiszewski, C.        | 59       | Tormala, Z.               | 23.5   | Haws, K. L.           | 29     | Kahn, B.                  | 13.3     | Argo, J. J.                | 15 | Alba, J. W.        | 6.3      |
|            | Haws, K. L.            | 58       | Ragnubir, P.              | 23.1   | Jonar, G. V.          | 27     | Huber, J.                 | 12.5     | Chernev, A.                | 14 | Argo, J. J.        | 6.2      |
|            | Russell, C.            | 58       | Huber, J.                 | 22.9   | Hoyer, W. D.          | 27     | Richins, M.               | 11.7     | Alba, J. W.                | 14 | Sengupta, J.       | 5.7      |
|            | Simonson, I.           | 58       | Chernev, A.               | 22.7   | Sniv, B.              | 27     | Kardes, F. R.             | 11.6     | Peracchio, L.              | 14 | Jonar, G. V.       | 5.6      |
|            | Arnould, E. J.         | 57       | Dhar, R.                  | 22.5   | Scriwarz, N.          | 26     | Jonar, G. V.              | 11.5     | Maneswaran, D.             | 14 | Etkin, J.          | 5.5      |
|            | Noreweage, C. K.       | 55       | Netemeyer, R. G.          | 21.8   | Chernev, A.           | 26     | Lamberton, C.             | 11.3     | Norwitz, V. G.             | 13 | Dani, D. W.        | 5.5      |
|            | Parideraere, IVI.      | 55       | baumgartner, n.           | 21.7   | Daumgartner, n.       | 20     | White, K.                 | 11.0     | NUWIIS, S. IVI.            | 13 | Dridr, K.          | 5.5      |
|            | Baumgartner, H.        | 54       | Lynch, J.                 | 21.3   | Pham, IVI. I.         | 26     | Baumgartner, H.           | 10.8     | Simonson, I.               | 12 | Kozinets, R. V.    | 5.5      |
|            | Inman, J. J.           | 54       | Shiruman C                | 21.1   | Argo, J. J.           | 20     | lvieyer, R. J.            | 10.7     | Arriouia, E. J.            | 12 | Aniuwana, K.       | 5.4      |
|            | Newman, G.             | 54       | Thempson C                | 21.0   | Sengupta, J.          | 20     | Sengupta, J.              | 10.7     | IVIICK, D. G.              | 12 | War D              | 5.5      |
|            | Berger, J.             | 52       | Inompson, C.              | 20.5   | Waneswaran, D.        | 26     | Schlosser, A.             | 10.6     | Aniuwalia, K.              | 12 | Yan, D.            | 5.2      |
|            | IdCODUCCI, D.          | 52       | INIOTEWEUge, C. K.        | 20.4   | Rucker, D. D.         | 25     | SIIIV, D.                 | 10.4     | Innidit, J. J.             | 11 | Huber, J.          | 5.0      |
|            | Lyncn, J.              | 51       | Estes, Z.                 | 20.3   | Huber, J.             | 25     | Scriwarz, N.              | 10.3     | Huber, J.<br>Kardos, F. P. | 11 | Karoes, F. K.      | 4.9      |
|            | Veriegn, P.            | 10       | Alba L M                  | 20.2   | ivieyer, K. J.        | 25     | WUTWICZ, V. G.            | 10.2     | Narues, F. K.              | 11 | Amouid, E. J.      | 4.ð      |
|            | Alud, J. W.            | 49       | Alba, J. W.               | 20.1   | NUWIIS, S. IVI.       | 25     | Aigu, J. J.<br>Bagbubir D | 9.9      | van Usseiaer, S. M.J.      | 11 | Ininidiî, J. J.    | 4.ð      |
|            | Ndiiii, D.<br>Smidte A | 49<br>49 | KdIIII, D.<br>Schmitt B ⊔ | 20.0   | Interior C            | 24     | Haws K I                  | 9.8      | BUILUII, L. E.<br>Price I  | 11 | Corchoff A D       | 4.0      |
|            | Simuts, A.             | 40       | Juliana D                 | 19.9   |                       | 24     | naws, N. L.               | 9.7      | FILE, L.                   | 11 | Gershoff, A. D.    | 4.7      |
|            | winer, ĸ.              | 48       | winer, ĸ.                 | 18.9   | van Osselaer, S. M.J. | 24     | Peracchio, L.             | 9.5      | IVICGIII, A. L.            | 11 | Aggarwai, P. J.    | 4.7      |

maximum values, as well as the 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup> percentiles, thereby giving a comprehensive picture of the distribution of the metrics across the full set of 340 *JCR/JCP* editorial board members. Percentile information is especially useful given the strong positive

skewness of the productivity metrics (see WA 3). The table also identifies the top 34 scorers (i.e., the top 10%) for each metric. Similar tables organized by seniority level are provided in WA 2.

As of early 2022, the editorial board members of *JCR* and *JCP* had published an average of 25.1 articles (QT; Mdn = 19), 11.6 of which appeared in the top five marketing journals (QM5; Mdn = 9), and 5.6 are *JCR* articles (QJCR; Mdn = 4). Adjusted for co-authorship, the weighted average number of publications per researcher drops to 9.9, assuming unequal contribution aligned with the order of authorship (OWQT; Mdn = 7.6). Therefore, on average, *JCR/JCP* editorial board members have published the equivalent of about 10 solo-authored articles, of which about 5 appeared in the top marketing journals (OWQM5; Mdn = 3.9), and 2.5 were *JCR* articles (OWQJCR; Mdn = 2). Across statistics, the ratio between each unadjusted publication metric (QT, QM5, QJCR) and its authorship-adjusted counterpart (OWQT, OWQM5, OWQJCR) typically ranges between 2.2 and 2.5. Therefore, a rule of thumb when evaluating the productivity of consumer researchers is to treat each solo-authored publication as equivalent to 2.2–2.5 co-authored publications.

The list of top scholars across productivity metrics is self-explanatory. In terms of total productivity across all journals (QT, OWQT), prominent social psychologists dominate the ranking, whereas in terms of productivity in top marketing journals only (QM5, OWQM5) or in JCR (QJC, OWQJCR), more "mainstream" senior consumer/marketing scholars dominate. The more useful statistics may be the percentile ranges provided for each metric, which can serve as a reference for evaluating the productivity of other consumer researchers, present or future. For example, a researcher with less than five publications in the top five marketing journals (QM5) would be in the bottom quartile relative to *JCR/JCP* editorial board members, whereas a

researcher who has published two solo-authored *JCR* articles (OWQJCR) would be comparable to the median *JCR/JCP* editorial board member.

#### THE CITATION IMPACT OF CONSUMER SCHOLARS

#### Citation-Impact Measures

We tabulated the total number of WoS citations garnered by each researcher across their entire set of articles (CT, for "citation total"), which is the most common measure of impact. As a second measure of citation impact, more focused on marketing and consumer research, we tabulated the total number of WoS citations received by each researcher's top marketing publications (CM5, for "citations marketing top 5"). As we did for the measures of productivity, we computed two versions of each citation measure. The first was the unadjusted version (CT and CM5), wherein authors are given full credit for the citations of every article they published, regardless of the authorship structure. In a second version of the measures, denoted OWCT and OWCM5, authors were credited with a fraction of the citations received by each article proportional to  $\frac{2(n-a+1)}{n(n+1)}$ , as suggested by Abbas (2011), under the assumption that authors are typically listed in order of their relative contributions.

A major limitation of total-number-of-citation metrics, such as CT or CM5, is that such measures may be overly dependent on a single publication that receives an unusually high number of citations and may not be representative of the researcher's overall body of work. As an additional measure of impact that partly addresses this issue, we computed each researcher's h-index (HI) based on the list of publications recorded in our dataset. A scientist has an index of h if h of his or her papers have received at least h citations (Hirsh 2005). The h-index has a number of desirable qualities, including its simplicity, objectivity, and insensitivity to a small number of unusually highly cited papers. One drawback of this index is its sensitivity to

researchers' sheer productivity. Everything else being equal, researchers who publish many articles will tend to have higher *h*-indexes compared to researchers who publish fewer articles. For example, a researcher who published 20 articles with 20 citations each (400 citations in total) will have a higher *h*-index (HI = 20) than a researcher who published 10 articles with 100 citations each (HI = 10 with 1,000 citations in total). In addition, the *h*-index may obscure material differences between researchers' citations. For instance, a researcher whose five publications have 0, 1, 3, 4, and 4 citations, respectively, would have the same *h*-index (3) as a researcher whose five publications have 2, 2, 3, 20, and 40 citations. Moreover, the *h*-index does not correct for co-authorship, thereby exaggerating the impact of frequent minor contributors to multiple-author papers. Additional issues with the *h*-index and total citation measures are identified below.

#### Citation-Impact Results

Table 2 presents the editorial board members' statistics in terms of the above-described citation metrics and identifies the top 10% of scholars for each metric. Similar tables broken down by seniority are provided in WA 4. Like the productivity metrics summarized in Table 1, the citation-impact metrics summarized in Table 2 all have strongly skewed distributions (see WA 5), again underscoring the value of comprehensive quantile statistics for assessing consumer scholarship.

Whereas the average total number of citations (QT) of the sample is 2,071 (SD = 3,265), the median total number of citations is much lower at 1,014. This is because the distribution of total number of citations is very positively skewed (skewness = 4.40), with some extraordinarily high scorers with more than 15,000 WoS citations each. It is interesting to note that the top three scorers in terms of total number of citations (Petty, Schwarz, and Vohs) are also the top three

scorers in terms of total number of publications (see Table 1). Indeed, there is a very strong correlation (r = .88) between researchers' total number of citations (CT) and their total number of publications (QT; see WA 6a). This correlation remains strong even after controlling for differences in seniority (partial r = .82; see WA 6b). Therefore, even though the total number of citations is generally believed to provide added information over and above a researcher's sheer number of publications, empirically the information provided by the total number of citations is largely redundant with the level of productivity. When total citations are adjusted for authorship (OWCT), the relative position of more "mainstream" consumer researchers (e.g., R. Belk, M. Richins, J. Bettman) improves. With respect to the rest of the distribution, a consumer researcher with 1,000 total citations would be comparable to the median JCR/JCP editorial board member, whereas it would take more than 2,300 total citations to be in the top quartile of the distribution and about 400 total citations to reach the 25<sup>th</sup> percentile.

A possibly more pertinent measure of citations is the total number of citations received by articles published in top marketing journals (CM5). Among *JCR/JCP* editorial board members, the median number of such citations is 539, the 25<sup>th</sup> percentile is 204, and the 75<sup>th</sup> percentile is 1,456. Based on this metric, none of the social psychologists identified earlier appears among the top 10% of scholars, indicating that these researchers' very high levels of citations are mostly associated with publications outside consumer research. The most cited consumer scholars based on their top marketing publications (CM5) include R. Belk, J. Lynch, and D. Lehmann. The ranking changes somewhat if the citations are adjusted for co-authorship, rewarding researchers who tend to occupy more senior authorship positions on highly cited papers (e.g., M. Richins, C. Thompson) relative to researchers who tend to occupy more junior authorship positions (e.g., D. Lehmann, Netemeyer). These ordered-authorship-weighted

measures of citation (OWCT and OWCM5) may provide a fairer and more accurate representation of the relative citation impact of consumer researchers than the unadjusted measure typically used in our field (CT). Moreover, the authorship-weighted measures of citations are somewhat less correlated with the sheer number of corresponding publications ( $r_{OWCT, QT} = .79$ ;  $r_{OWCM5, QM5} = .63$ ) than are the unadjusted measures of citations ( $r_{CT, QT} = .87$ ;  $r_{CM5, QM5} = .73$ ), thereby providing information that is less redundant.

|            |                           | 144      |  |                        |  |                       | Authorship-adjusted<br>Number of Citations of Top |       |                  |    |  |  |
|------------|---------------------------|----------|--|------------------------|--|-----------------------|---|-------|------------------|----|--|--|
| Statistics | Total Number of C<br>(CT) | itations | Authorship-adjus<br>Number of Citation | ted Total<br>is (OWCT) | Number of Citatio<br>Marketing Citatio | ns of Top<br>ns (CM5) | Marketing Cita<br>(OWCM5)                         | tions | H-Index          |    |  |  |
| Mean       | 2069                      |          | 898                                    |                        | 1242                                   |                       | 589   |       | 15.09            |    |  |  |
| S.D.       | 3261                      |          | 1421                                   |                        | 1744                                   |                       | 934   |       | 10.31            |    |  |  |
| Skewness   | 4.41                      |          | 4.33                                   |                        | 2.60                                   |                       | 4.18  |       | 2.18             |    |  |  |
|            |                           |          |  |                        |  |                       |   |       |                  |    |  |  |
| Max        | 29786                     |          | 12604                                  |                        | 11964                                  |                       | 9615  |       | 81.00            |    |  |  |
| 0.90       | 4837                      |          | 2292                                   |                        | 3559                                   |                       | 1700  |       | 27.00            |    |  |  |
| 0.75       | 2383                      |          | 935                                    |                        | 1456                                   |                       | 687   |       | 20.00            |    |  |  |
| 0.50       | 1014                      |          | 430                                    |                        | 539                                    |                       | 241   |       | 12.00            |    |  |  |
| 0.25       | 389                       |          | 177                                    |                        | 204                                    |                       | 94  |       | 8.00             |    |  |  |
| 0.10       | 186                       |          | 79                                     |                        | 86                                     |                       | 38  |       | 5.00             |    |  |  |
| IVIIN      | /                         |          | 2                                      | To                     | /<br>n-10% scholars                    |                       | 2   |       | 1.00             |    |  |  |
|            | СТ                        |          | OWCT                                   |                        | CM5                                    |                       | OWCM5   |       | H-Index          |    |  |  |
|            | Petty, R.                 | 29786    | Belk, R. W.                            | 12604                  | Belk, R. W.                            | 11964                 | Belk, R. W.                                       | 9615  | Petty, R.        | 81 |  |  |
|            | Schwarz, N.               | 26156    | Petty, R.                              | 10580                  | Lynch, J.                              | 9961                  | Richins, M.                                       | 5308  | Schwarz, N.      | 70 |  |  |
|            | Vohs, K.                  | 18923    | Schwarz, N.                            | 10505                  | Lehmann, D. R.                         | 9014                  | Simonson, I.                                      | 4128  | Vohs, K.         | 62 |  |  |
|            | Belk, R. W.               | 16239    | Vohs, K.                               | 5886                   | Bettman, J. R.                         | 7572                  | Thompson, C.                                      | 3824  | Lehmann, D. R.   | 53 |  |  |
|            | Lynch, J.                 | 12725    | Richins, M.                            | 5622                   | Arnould, E. J.                         | 7511                  | Lynch, J.   | 3748  | Bettman, J. R.   | 45 |  |  |
|            | Rucker, D. D.             | 12461    | Bettman, J. R.                         | 5201                   | Simonson, I.                           | 7074                  | Bettman, J. R.                                    | 3617  | Netemeyer, R. G. | 44 |  |  |
|            | Lehmann, D. R.            | 12014    | Simonson, I.                           | 5126                   | Alba, J. W.                            | 6654                  | Arnould, E. J.                                    | 3395  | Belk, R. W.      | 43 |  |  |
|            | Netemeyer, R. G.          | 11804    | Bhattacharya, C.                       | 5094                   | Baumgartner, H.                        | 6651                  | Kozinets, R. V.                                   | 3325  | Simonson, I.     | 41 |  |  |
|            | Bhattacharva. C.          | 11803    | Lynch, J.                              | 4767                   | Hover. W. D.                           | 6481                  | Alba, J. W.                                       | 3143  | Hover. W. D.     | 41 |  |  |
|            | Bettman, J. R.            | 11735    | Arnould. E. J.                         | 4278                   | Bhattacharva. C.                       | 6313                  | Dhar. R.  | 2891  | Dahl. D. W.      | 40 |  |  |
|            | Sen. S.                   | 9997     | Thompson, C.                           | 4028                   | Richins, M.                            | 6238                  | Berger, J.  | 2837  | Dhar. R.         | 38 |  |  |
|            | Simonson, I.              | 9515     | Netemever, R. G.                       | 3891                   | Thompson, C.                           | 5932                  | Escalas. J. E.                                    | 2762  | Rucker, D. D.    | 38 |  |  |
|            | Arnould, E. J.            | 9274     | Alba, J. W.                            | 3799                   | Dhar. R.                               | 5799                  | Bhattacharva. C.                                  | 2712  | Krishna. A.      | 37 |  |  |
|            | Hover, W. D.              | 8787     | Kozinets. R. V.                        | 3769                   | Netemever, R. G.                       | 5238                  | Hoffman, D.                                       | 2598  | Lvnch. J.        | 36 |  |  |
|            | Baumgartner, H.           | 8195     | Rucker, D. D.                          | 3733                   | Price, L.                              | 5067                  | Lehmann, D. R.                                    | 2593  | Arnould. E. J.   | 36 |  |  |
|            | Alba. J. W.               | 8026     | Sen. S.                                | 3684                   | Hoffman. D.                            | 4995                  | Baumgartner, H.                                   | 2472  | Kahn, B.         | 36 |  |  |
|            | Novak. T.                 | 7067     | Berger, J.                             | 3493                   | Berger, J.                             | 4951                  | lacobucci. D.                                     | 2313  | Inman, J. J.     | 36 |  |  |
|            | Dhar. R.                  | 6874     | Lehmann, D. R.                         | 3489                   | Batra, R.                              | 4942                  | Sen. S.   | 2289  | Janiszewski. C.  | 34 |  |  |
|            | Richins, M.               | 6763     | Dhar. R.                               | 3387                   | Novak. T.                              | 4886                  | Rindfleisch. A.                                   | 2224  | Alba, J. W.      | 33 |  |  |
|            | Batra, R.                 | 6582     | Hoffman. D.                            | 3377                   | Kozinets, R. V.                        | 4869                  | Roedder John. D.                                  | 2212  | Huber. J.        | 33 |  |  |
|            | Hoffman. D.               | 6526     | Escalas. J. E.                         | 3145                   | Rindfleisch. A.                        | 4864                  | Fisher, R. J.                                     | 2154  | Pauwels, K.      | 32 |  |  |
|            | Thompson, C.              | 6356     | Baumgartner, H.                        | 3010                   | Dahl. D. W.                            | 4748                  | Rao, A.   | 2073  | Kardes, F. R.    | 31 |  |  |
|            | Price. L.                 | 6223     | Fisher, R. J.                          | 2789                   | Lutz. R. J.                            | 4694                  | Mick. D. G.                                       | 2072  | Hill, R.         | 31 |  |  |
|            | Kardes, F. R.             | 6050     | lacobucci. D.                          | 2672                   | Sen. S.                                | 4681                  | Batra, R.   | 2062  | Tormala. Z.      | 31 |  |  |
|            | Kozinets, R. V.           | 5870     | Batra, R.                              | 2648                   | Janiszewski. C.                        | 4347                  | Price. L.   | 1998  | Schmitt. B. H.   | 30 |  |  |
|            | Dahl, D. W.               | 5635     | Hover, W. D.                           | 2598                   | Rao. A.                                | 4237                  | Novak. T.   | 1944  | Price. L.        | 29 |  |  |
|            | Kahn. B.                  | 5617     | Novak. T.                              | 2597                   | Roedder John. D.                       | 4178                  | Krishna. A.                                       | 1931  | Pham. M. T.      | 29 |  |  |
|            | Berger, J.                | 5599     | Lee. A. Y.                             | 2403                   | lacobucci. D.                          | 3995                  | Janiszewski. C.                                   | 1919  | Shiv. B.         | 29 |  |  |
|            | Lee, A. Y.                | 5454     | Kahn, B.                               | 2381                   | Escalas. J. E.                         | 3805                  | Hover, W. D.                                      | 1916  | Raghubir, P.     | 29 |  |  |
|            | Rindfleisch, A.           | 5342     | Rindfleisch, A.                        | 2347                   | Inman, J. J.                           | 3789                  | Kirmani, A.                                       | 1862  | Shrum, L.J.      | 29 |  |  |
|            | lacobucci, D.             | 5083     | Pham, M. T.                            | 2341                   | Mick, D. G.                            | 3620                  | Chernev, A.                                       | 1827  | Berger, J.       | 28 |  |  |
|            | Lutz, R. J.               | 5081     | Price, L.                              | 2339                   | Kahn, B.                               | 3580                  | Huber, J.   | 1739  | Newman, G.       | 28 |  |  |
|            | Maheswaran. D.            | 4913     | Mick, D. G.                            | 2336                   | Kardes, F. R.                          | 3580                  | Maheswaran. D.                                    | 1700  | Thompson, C.     | 27 |  |  |
|            | Pauwels K                 | 4837     | Maheswaran D                           | 2294                   | Maheswaran D                           | 3559                  | Netemever R G                                     | 1700  | Baumgartner H    | 27 |  |  |
|            |                           |          | anconaran, D.                          |                        |  |                       |   | 2,00  | Roedder John, D  | _/ |  |  |
|            |                           |          |  |                        |  |                       |   |       | Maheswaran D     |    |  |  |
|            |                           |          |  |                        |  |                       |   |       | Monuita V.C      |    |  |  |
|            |                           |          |  |                        |  |                       |   |       | WOIWILZ, V. G.   |    |  |  |

Table 2. JCR/JCP ERB Members' Citation-Based Metrics (N = 340)

Finally, the median *h*-index of *JCR/JCP* editorial board members is 12, the 25<sup>th</sup> percentile is 8, and the 75<sup>th</sup> percentile is 20. The top 10% of scorers have *h*-indexes of 27 and above. A majority of them, 62.2%, have received one or more of the following major career awards: ACR Fellow, SCP Fellow, and SCP Distinguished Scientific Contributions. This supports the predictive value of the *h*-index as an indicator of overall stature in the field, although the prediction is far from perfect. An important caveat about the *h*-index is that it is strongly correlated with the sheer productivity of the researcher. In our sample, there was a .93 correlation between researchers' *h*-index (HI) and their total number of publications (QT; WA 6). There was also a strong correlation of .68 between the *h*-index and the number of years since the PhD was obtained. The *h*-index should therefore be interpreted with caution when comparing researchers of different seniority. Finally, there was a strong correlation of .88 between the *h*-index (HI) and the total number of citations (CT), which is expected given that both measures are indicators of the cumulative impact of a researcher. Therefore, in practice, the two measures provide very similar information as impact metrics.

#### THE PROPENSITY FOR THOUGHT LEADERSHIP: THE *p*-INDEX

The fact that the two most common measures of impact used in our field—the total number of citations and the *h*-index—are both highly correlated with the number of publications, which is mostly a measure of productivity, underlines the need for an alternative measure of scholarship that would be less impacted by the researcher's sheer productivity. Ideally, such a measure would have the following properties: (a) It would be objective, transparent, and easy to compute; (b) it would provide information that is not redundant with the list of publications and measures of productivity; (c) it would not be easy to "game"; (d) it would not be overly dependent on a single publication; (e) it would allow comparisons of scholars of different

seniority; and (f) it would accommodate the fact that consumer researchers tend to publish across a broad variety of journals with distinct patterns of citations. As such a measure, we propose the p-index.

#### The p-Index

The *p*-index is the average citation percentile rank of a researcher's published articles relative to other articles published the same year by the same journals. For instance, suppose that one of Researcher A's articles was published in Journal X in 2015, receiving a total of 50 citations to date. If in 2015 Journal X published a total of 65 articles of which 42 have fewer than 50 citations to date, the percentile rank of that article in that journal that year (PR<sub>i</sub>) would be 42/65 = 64.6%. Similar PR<sub>i</sub> are computed for each of the researcher's publications, and the mean of the researcher's  $PR_i$  across all his or her publications is the researcher's *p*-index. (An alternative would be to define the p-index as the median PRj. However, as discussed in WA 13, additional analyses indicate that the mean PR<sub>j</sub> provides a more stable summary statistic than the median PR<sub>i</sub>.) The *p*-index, hereafter denoted PI, thus reflects the tendency of a researcher's articles to relatively outperform, in terms of citations, other articles published in the same journals as those where this researcher published his or her work, controlling for year of publication and thereby for the effects of seniority. A researcher whose PI is substantially above 0.5 has publications that, on average, tend to be more cited relative to comparable publications, independent of where and when these articles were published. Conversely, a researcher whose PI is substantially below 0.5 has publications that, on average, tend to be less cited than comparable publications. Therefore, this measure can be regarded as an indicator of the relative interestingness of a researcher's body of work to other researchers, or the researcher's propensity for thought leadership as revealed by peer citations. As a variant of the *p*-index that is more

tailored to consumer researchers, we also propose the PIM5, which is the average  $PR_j$  of the researcher's top five marketing publications only.

Although admittedly simple, the *p*-index, whether in its basic PI form or its PIM5 variant, possesses many of the properties that one would want from a scholarship metric: It is simple, transparent, objective, easy to calculate, not easy to game, not overly sensitive to a single article, and comparable across scholars of different seniority who publish across a wide variety of journals. In addition, as shall be shown, the *p*-index has a well-behaved, symmetric, quasi-normal distribution (see WA 10), and it is largely orthogonal to the researcher's sheer productivity, total number of citations, and *h*-index, thus conveying information over and above these previously discussed metrics. As will be shown below, provided that the researcher has a sufficient record of publications, the *p*-index is internally consistent and has good predictive validity as an indicator of scholarship. However, the metric may not be as informative when the number of publications is low, in which case focusing on individual article-level PRj's may be preferable.

#### Internal Consistency and Reliability of the p-Index

To verify that the *p*-index indeed captures a stable characteristic of researchers and is not merely an aggregation of mostly chance effects, we examined the extent to which random sets of each researcher's articles have  $PR_j$  that are internally consistent. For every researcher with at least X publications published prior to 2020 (to focus on more stable citation data), we drew 5,000 random sets of X articles and computed the internal consistency of these publications'  $PR_j$ using Cronbach's  $\alpha$ . The size of these random sets (X) was varied from 5 to 20 for sensitivity analysis. As summarized in WA 7, the results confirm that there is substantial internal consistency in the relative citation rank (PR<sub>j</sub>) of consumer researchers' articles. As would be

p-Index of Thought Leadership

expected, the internal consistency increases with the number of articles sampled: With as few as 5 articles, the average Cronbach's  $\alpha$  is .32; with 10 articles, the average  $\alpha$  is .50; with 15 articles, the average  $\alpha$  is .61; and with 20 articles, the average  $\alpha$  reaches a plateau of .67. Therefore, if a researcher has a sufficient number of publications (say, 15 articles), one can be reasonably confident that his or her PI reflects something stable and systematic about the nature of his or her work. A researcher whose articles tend to rank relatively high (or low) in terms of citations in one journal is likely to have other articles that rank relatively high (or low) in other journals—at least among editorial board members of *JCR* and *JCP*. (As detailed in WA 13, we also observed substantial—but lower—internal consistency with 50 other consumer researchers who were randomly selected.)

As a more substantive test of the reliability of the *p*-index, we additionally examined whether the *p*-index of a researcher's first few articles is predictive of the *p*-index of the next few articles. Among researchers with 10 or more articles, the *p*-index of the first five articles had a correlation of r = .42 with the *p*-index of the next five articles, whereas among researchers with 20 or more articles, the *p*-index of the first ten articles had a correlation of r = .54 with the *p*index of the next ten articles (see WA 8). This finding is further evidence that the *p*-index is a reliable indicator of a trait-like characteristic of researchers. The *p*-index of a researcher's early record of publications is substantially predictive of the relative citation performance of his or her subsequent publications, which is valuable information for evaluating the likely trajectory of a researcher's impact (e.g., in promotion decisions). We additionally found that the *p*-index of researchers' top marketing publications (PIM5) is strongly correlated with the *p*-index of their publications outside of marketing (e.g., psychology or economics, r = .45), which further

supports the notion that the *p*-index reflects something fundamental about researchers' ability to generate interest in their work.

#### Distribution of the p-Index across Consumer Scholars

Table 3 provides the PI and PIM5 statistics for all 340 ERB members, based on publications prior to 2020 (as more recent publications may have unstable PR<sub>j</sub>). Similar tables broken down by seniority can be found in WA 9. As with the other metrics, we also computed an authorship-adjusted version, weighing each article's PR<sub>j</sub> by the authorship-credit weights discussed earlier  $\left(\frac{2(n-a+1)}{n(n+1)}\right)$ , then aggregating the weighted PR<sub>j</sub> across the researcher's articles. The authorship-adjusted versions of the *p*-Index are denoted OWPI and OWPIM5. As shown in WA 10, unlike other scholarship metrics discussed so far, *p*-index scores have symmetric, normal-like distributions (skewness  $\approx$  0; Kolmogorov-Smirnov D = .05 or less), which makes them easy to interpret. Moreover, *p*-index measures are only weakly correlated with productivity measures such as the total number of publications (QT) and the number of top marketing

|            |                      |             |                     |         |                       |             | Authorship-adjusted P    | -index of |                               |        |  |
|------------|----------------------|-------------|---------------------|---------|-----------------------|-------------|--------------------------|-----------|-------------------------------|--------|--|
|            |                      |             | Authorship-adjusted | P-Index | P-index of Top Mar    | rketing     | Top Marketing Publi      | cations   | Frequency of Mentions in 2020 |        |  |
| Statistics | P-Index (PI)         |             | (OWPI)              |         | Publications (PII     | M5)         | (OWPIM5)                 |           | Esteem Surve                  | у      |  |
| Mean       | 51.0                 |             | 50.7                |         | 53.7                  |             | 53.7                     |           | 1.5                           |        |  |
| S.D.       | 14.0                 |             | 14.9                |         | 17.1                  |             | 17.9                     |           | 4.1                           |        |  |
| Skewness   | 0.2                  |             | 0.2                 |         | 0.0                   |             | 0.0                      |           | 5.9                           |        |  |
| Max        | 97.0                 |             | 97.0                |         | 98.6                  |             | 98.6                     |           | 46.0                          |        |  |
| 0.90       | 68.7                 |             | 70.1                |         | 76.0                  |             | 77.2                     |           | 4.0                           |        |  |
| 0.75       | 60.1                 |             | 60.8                |         | 65.5                  |             | 66.3                     |           | 1.0                           |        |  |
| 0.50       | 50.6                 |             | 50.0                |         | 53.0                  |             | 53.2                     |           | 0.0                           |        |  |
| 0.25       | 41.6                 |             | 40.5                |         | 43.5                  |             | 42.5                     |           | 0.0                           |        |  |
| 0.10       | 32.7                 |             | 31.7                |         | 30.8                  |             | 31.0                     |           | 0.0                           |        |  |
| Min        | 3.8                  |             | 14.6                |         | 3.7                   |             | 3.8                      |           | 0.0                           |        |  |
|            | Top 15 of 191 Schola | rs with 15+ | Total Publications  | I       | op 15 of 144 Scholars | with 10+ To | op Marketing Publication | ns        |                               |        |  |
|            | PI                   |             | OWPI                |         | PIM5                  |             | OWPIM5                   |           | Esteem Survey Mer             | ntions |  |
|            | Richins, M.          | 81.8        | Richins, M.         | 82.9    | Richins, M.           | 84.1        | Richins, M.              | 85.2      | Lynch, J.                     | 46     |  |
|            | Schreier, M.         | 81.6        | Schreier, M.        | 82.2    | Stephen, A. T.        | 78.2        | Stephen, A. T.           | 83.6      | Belk, R. W.                   | 22     |  |
|            | Plassmann, H.        | 77.8        | Plassmann, H.       | 78.4    | Thompson, C.          | 77.7        | Batra, R.                | 79.6      | Dahl, D. W.                   | 22     |  |
|            | Bhattacharya, C.     | 76.3        | Kozinets, R. V.     | 75.4    | Batra, R.             | 77.0        | Kozinets, R. V.          | 78.2      | Bettman, J. R.                | 21     |  |
|            | Canniford, R.        | 74.3        | Price, L.           | 73.6    | Kozinets, R. V.       | 76.9        | Rindfleisch, A.          | 77.7      | Pham, M. T.                   | 20     |  |
|            | Kozinets, R. V.      | 74.2        | Bhattacharya, C.    | 73.4    | Price, L.             | 75.8        | Thompson, C.             | 77.6      | Berger, J.                    | 16     |  |
|            | Thompson, C.         | 73.6        | Escalas, J. E.      | 73.2    | Rindfleisch, A.       | 74.6        | Price, L.                | 76.6      | Janiszewski, C.               | 15     |  |
|            | Arnould, E. J.       | 71.0        | Batra, R.           | 72.1    | Holmes, C. M.         | 72.6        | Escalas, J. E.           | 75.6      | Simonson, I.                  | 13     |  |
|            | Batra, R.            | 70.9        | Rindfleisch, A.     | 71.4    | Peck, J.              | 72.5        | Peck, J.                 | 73.9      | Rucker, D. D.                 | 13     |  |
|            | Campbell, M. C.      | 70.5        | Thompson, C.        | 70.9    | Kirmani, A.           | 71.5        | Kirmani, A.              | 73.4      | Inman, J. J.                  | 12     |  |
|            | Eckhardt, G.         | 70.5        | Campbell, M. C.     | 70.7    | Escalas, J. E.        | 70.0        | Hoffman, D.              | 72.7      | Alba, J. W.                   | 11     |  |
|            | Price, L.            | 70.3        | Hoffman, D.         | 70.7    | Hoffman, D.           | 69.9        | Berger, J.               | 72.0      | Lehmann, D. R.                | 10     |  |
|            | Kirmani, A.          | 69.1        | Kirmani, A.         | 69.7    | Campbell, M. C.       | 69.8        | Rucker, D. D.            | 71.7      | Thompson, C.                  | 9      |  |
|            | Rindfleisch, A.      | 67.9        | Peck, J.            | 69.2    | Pauwels, K.           | 69.3        | Campbell, M. C.          | 70.1      | Schwarz, N.                   | 8      |  |
|            | Landwehr, J.         | 67.7        | Landwehr, J.        | 68.5    | Arnould, F. J.        | 69.0        | Holmes, C. M.            | 69.7      | Kahn, B.                      | 8      |  |

publications (QM5) (largest r = .08; see WA 6a). Therefore, unlike total citation measures (e.g., CT, CM5) or the *h*-index, *p*-index scores provide information that is not confounded with the sheer productivity of the researcher.

Based on researchers' total set of publications, the median *p*-index was 50.6% when unadjusted for authorship (PI), and 49.9% when adjusted for authorship (OWPI). Therefore, on average, across all journals where they publish, *JCR/JCP* board members do not consistently outperform or underperform other authors in terms of citations. However, when only articles published in top marketing journals are considered, *JCR/JCP* board members do tend to outperform other authors who publish in the same journals. The median PIM5 was 53.0% and the median OWPIM5 was 53.4%, both significantly greater than 50% at p < .001. This is not surprising given that these editorial board members were presumably selected based on their marketing and consumer research credentials.

More informative is the substantial variance that this selective sample of consumer researchers exhibits in terms of their *p*-index scores (SD varying between 14.0% and 17.9%). Across the entire sample, the top quartile of researchers have *p*-indexes of 60–65% and higher, depending on the measure, whereas the bottom quartile have *p*-indexes of 40–43% and lower. Table 3 identifies the top 15 scorers for the various *p*-index measures. Given that a minimum number of articles is required for reliable *p*-index scores, the top scorers for the all-publication indexes (PI, OWPI) were identified from researchers with at least 15 publications in total (N = 193), whereas the top scorers for the top marketing-publication indexes (PIM5, OWPIM5) were identified from researchers with at least 10 top marketing publications (N = 144). The top *p*-index scorers are associated with a broad variety of research traditions and substantive areas, including consumer measurement (M. Richins), corporate responsibility and sustainability (C.

Bhattacharya), decision neuroscience (H. Plassmann), consumer culture theory (E. Arnould, R. Kozinets, C. Thomspon, L. Price), social media marketing (A. Stephen), marketplace technology (D. Hoffman), and sensory marketing (J. Peck), among others. The common trait shared by these high-*p*-index scholars appears to be a critical mass of publications with a distinct methodological or substantive emphasis that they have become strongly associated with.

#### Predictive Validity of the p-Index

The *p*-index (and its variants) is not meant to be interpreted in isolation as an allencompassing single measure of scholarship. Instead, the index is meant to provide useful impact-related information that complements measures of productivity such as the number of A's. As a complementary indicator of scholarship beyond productivity, the *p*-index may be more useful than standard measures of impact such as the total number of citations or the *h*-index, which are too highly correlated with the sheer number of publications. To test the relative informativeness of the *p*-index, we examined how well different combinations of the metrics reported in Tables 1, 2, and 3 predict the frequency with which researchers were mentioned among those whose work is admired by other consumer scholars, which is a measure of peer esteem (last column of Table 3). We performed a series of negative binomial regressions across all researchers (N = 340), modeling peer esteem scores as a function of different pairs of predictors, controlling for seniority. Within each pair of predictors, one was a measure of productivity, QT or QM5, and the other was one of the measures of impact considered here (CT, CM5, HI, PI, PIM5). As summarized in WA 11, the results show a better overall model fit (lower BIC values) when the researcher's productivity is operationalized as the number of top marketing publications (QM5) rather than as the total number of publications (QT; see Models 1A–3A vs. Models 1B–3B). More importantly, when combined with the number of top

marketing publications (QM5), the *p*-index of the top marketing publications (PIM5;  $\chi^2 = 6.94$ , *p* = .008) is a somewhat stronger predictor than the total number of citations garnered by these publications (CM5;  $\chi^2 = 5.3$ , *p* = .021) or the researcher's *h*-index (HI;  $\chi^2 = 4.44$ , *p* = .035; see Model 3B vs. Models 1B & 2B). Furthermore, in regression models in which, in addition to QM5, PIM5 is entered in *conjunction* with CM5 (Model 4) or with HI (Model 5), PIM5 tends to be a more reliable predictor of the peer esteem scores. These results support the predictive validity of the *p*-index, especially when focused on top marketing publications.

#### Quadrant Analysis of Productivity vs. Thought Leadership

The preceding results suggest that it is useful to evaluate consumer researchers along two complementary dimensions that are largely independent: (a) the researcher's productivity in



Productivity vs. p-Index of JCR/JCP Board Members with 5+ Top Marketing Publications before 2020 (N = 250)

terms of top marketing publications (the number of A's; here QM5) and (b) the *p*-index of these top marketing publications (PIM5). The figure below shows how the 250 *JCR/JCP* editorial board members with at least five top marketing publications before 2020 are distributed along these two complementary dimensions (see Baumgartner 2010, for a conceptually similar figure). (We use a cutoff of five top marketing publications to strike a balance between a comprehensive coverage of the sample and ensuring that the PIM5 scores are relatively stable. See WA 12 for an equivalent chart with scores adjusted for authorship.) As one would expect, there is more variability in *p*-indexes among researchers with fewer publications than among those with more publications, as extreme averages become less likely when the number of observations increases. More importantly, the figure clearly shows that consumer researchers' ability to publish in top marketing journals is largely unrelated to their ability to consistently attract scholarly interest in these publications. In other words, research productivity and thought leadership do not necessarily go hand in hand in consumer research.

Markers for the medians on both dimensions are included, thus identifying four quadrants. Quadrant A contains researchers with a relatively limited number of top marketing publications thus far, but whose publications seem to generate a high level of interest (with the caveat that their *p*-indexes are based on a limited number of articles). This set of researchers, which includes a high concentration of Consumer Culture Theory (CCT) researchers, could be seen as "potential thought leaders," if they are able to sustain a strong interest in their body of work as their number of top marketing publications increases. By contrast, quadrant C consists of researchers who have been very successful in terms of publishing in top marketing journals, but whose publications generally fail to attract significant interest. While researchers in this quadrant may have impressive resumés in terms of number of A's, many of them have PIM5 scores in the

bottom quartile of the 250 researchers compared in this analysis. With a high productivity but consistent inability to generate much interest in their publications, such researchers might be characterized as "productive incrementalists." An examination of these researchers' CVs reveals a high proportion of information-processing researchers with no well-defined substantive areas of interest whose questions tend to be narrow and disconnected from important consumption phenomena.

Quadrant D encapsulates researchers whose limited number of top marketing publications thus far have gained relatively little traction. These researchers might be characterized as "likely incrementalists," unless their future publications show a dramatic improvement in citation impact. Researchers in quadrant B have the most compelling profile: their many top marketing publications tend to generate relatively strong scholarly interest. This select set of scholars is identified by name. They could be viewed as "established thought leaders." Of the 36 scholars represented in the figure who received a major career award in consumer research (ACR Fellow, SCP Fellow, SCP Distinguished Scientific Contribution), 25 (69.4%) are in the "established thought leaders" quadrant, compared to nine (25%) in the "productive incrementalists" quadrant, one (2.8%) in the "potential leaders" quadrant, and one in the "likely incrementalists" quadrant ( $\chi^2$  (3) = 46.9,  $\phi$  = .43, p < .0001). This result adds face validity to this quadrant analysis, and further supports the diagnosticity of the *p*-index.

#### CONCLUSIONS

On the 50th anniversary of JCR's founding, as we consider the future of consumer research, it is important to revisit how we evaluate scholarship in our growing field. Too much of our emphasis is on the mere counting of the number of A's on researchers' CV, thus tacitly encouraging sheer productivity, and not enough is on the recognition and promotion of actual impact. It is rather telling that, of the 340 scholars examined in our study, only 24 (7.1%)

provided any indication of the level of citation received by their research in their publicly available CVs. Moving forward, there should be greater overall transparency as to how consumer scholars balance the sheer quantity of their publications with accepted indicators of scholarly impact. Our analyses contribute to this transparency by reporting detailed statistics on how an important sample of consumer researchers, the primary gatekeepers of the field, are distributed along a variety of scholarship metrics. Unlike other bibliometric analyses, which often focus on "top performers" along particular metrics, our analyses' detailed descriptive statistics cover the *full* distribution of scholars in our broad sample. For this reason, the statistics offer objective benchmarks for evaluating not just the researchers in our sample but other researchers as well. For example, if a given researcher has total citations, or an *h*-index, that would place him or her near the top quartile of the distribution of JCR/JCP editorial board members, this information would be useful for a faculty promotion committee. The benchmarks provided here may also be useful to academics putting together their promotion dossier, to editors assembling their editorial boards, to career award selection committees, and more generally, to any consumer researchers interested in assessing their own record of scholarship and that of others.

Besides offering extensive benchmarks for the evaluation of scholarship in consumer research, our findings provide insights into how such benchmarks should be interpreted. Results suggest that the most common measures of impact—the total number of citations and the *h*-index—may not provide that much incremental information over and above the sheer number of publications because these measures are highly correlated (i.e., confounded) with the sheer number of an impact-related metric such as the *p*-index that is less sensitive to the sheer productivity of the researcher and hence genuinely provides complementary information over and above the number

of A's that researchers have. Given a minimum number of publications, the *p*-index is (a) internally consistent, (b) predictive of the relative citation impact of subsequent publications, and (c) in our study, predictive of the degree of esteem that consumer scholars enjoy from their peers when combined with the number of top marketing publications. This index can be viewed as an indicator of a researcher's propensity for thought leadership.

Through the *p*-index, our findings reveal that productivity and thought leadership do not necessarily go hand in hand among consumer scholars. While some, who could be seen as established thought leaders, combine high productivity with a consistent ability to generate substantial interest in their work, others with impressive publication records produce research that routinely fails to generate much interest and could be regarded as more incremental. Such low *p*-indexes are more common among traditional information-processing researchers with no well-defined substantive areas of interest. It is the *combination* of high productivity in top marketing journals *with* thought leadership—not productivity alone—that seems to guide consumer scholars' esteem for other scholars and the likelihood that scholars will receive major career awards. If, as we hope, the *p*-index becomes widely accepted in the academic community, its predictive validity will further increase.

To avoid a pattern of incrementalism that characterizes much of the research published in our journals, consumer researchers are encouraged to focus on more important substantive issues and expand their theoretical toolkit beyond standard information processing theory. In addition, researchers and reviewers should beware of so-called "theories of studies," which refer to technically competent but artificial demonstrations of psychological phenomena that are devoid of substantive relevance (Pham 2013). Such studies typically have very limited impact—justifiably so. As a caveat, one should keep in mind that the *p*-index also depends on the mixture

of papers in a researcher's portfolio. A high proportion of review articles, methodological overviews, or CCT papers, all of which tend to be more highly cited, will naturally elevate a researcher's *p*-index.

While the *p*-index is computed across a researcher's entire set of publications, or across their top marketing publications, there are alternative ways of using the percentile rank scores (PRj) that are the basis of the index. One way is to focus on the PRj at the individual paper level. Indeed, compared to raw citation counts, PRj have several desirable properties: they have an intuitive scale between 0 and 1; and they can be compared across papers from different journals and of different ages. Focusing on individual PRj's makes sense when evaluating individual articles or when a researcher's number of publications is limited. Another approach (suggested by a reviewer) is to record only the top five PRj's that a researcher has for their A-level publications, based on the rationale that researchers' reputations are mostly driven by their best papers, not their entire set of publications. Such a metric would indeed provide useful information. However, as explained in WA 13, it would be more akin to the *h*-index and would tend to favor researchers who publish a lot (by virtue of a selection effect). Regardless, we hope that the present paper will prompt a more widespread reporting and consideration of citation impact in evaluating consumer scholarship. Over time, this practice will encourage a more selective pursuit of research with greater potential for impact and greater substantive relevance research that JCR and other major journals will happily publish.

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| Characteristic                |                            | Sample Bro                                     | eakdown                           |                     |
|-------------------------------|----------------------------|--|-----------------------------------|---------------------|
| Sex                           | Men: 181                   | Women: 159                                     |                                   |                     |
| Editorial board<br>membership | JCR & JCP: 120             | JCR only: 127                                  | JCP only: 93                      |                     |
| Institution location          | US: 246                    | Outside US: 94                                 |                                   |                     |
| Professorial rank             | Assistant<br>Professor: 28 | Associate<br>Professor/Senior<br>Lecturer: 115 | Full & Chaired<br>Professors: 197 |                     |
| Seniority (years post<br>PhD) | ≤ 10 Years: 52             | 11-20 Years: 157                               | 21-30 years: 77                   | $\geq$ 31 years: 54 |

## Web Appendix 1: Sample Composition (as of January-March 2022)

Distribution of the JCR/JCP ERB Members in terms of Seniority (Years since PhD) (N = 340)



## Web Appendix 2: Table 1'— JCR/JCP Board Members' Productivity Metrics by Cohort

|            |                                 |           | Table   | 1. JCR                           | JCP ERB Membe                          | ers' Pi  | roductivity Met                      | rics (N = | 52)   |   |              |     |
|------------|---------------------------------|-----------|---|----------------------------------|--|--|--------------------------------------|-----------|---|---|--------------|-----|
| Statistics | Total Number<br>Publications (C | of<br>(T) | Authorship-adju<br>Number of Publica<br>Assuming Orde<br>Authorship (OW | sted<br>itions -<br>ired<br>/QT) | Number of Top Mari<br>Publications (QM | Authorship-adjusted<br>of Top Marketing Pu<br>- Assumping Or<br>Authorship (OW | Number of JCR<br>Publications (QJCR) |           | Authorship-adjusted Num<br>of JCR Publications -<br>Assuming Ordered Author<br>(OWQJCR) |   |              |     |
| Mean       | 10.38                           |           | 4.57  |                                  | 5.60                                   |  | 2.62                                 |           | 2.89  |   | 1.39         |     |
| S.D.       | 6.31                            |           | 2.83  |                                  | 3.60                                   |  | 1.84                                 |           | 1.68  |   | 1.10         |     |
| Skewness   | 1.41                            |           | 1.23  |                                  | 1.67                                   |  | 1.57                                 |           | 1.43  |   | 2.24         |     |
| Max        | 33.00                           |           | 13.24   |                                  | 19.00                                  |  | 8.03                                 |           | 9.00  |   | 5.53         |     |
| 0.90       | 19.40                           |           | 9.60  |                                  | 9.70                                   |  | 4.64                                 |           | 5.00  |   | 2.41         |     |
| 0.75       | 13.75                           |           | 5.33  |                                  | 7.00                                   |  | 3.47                                 |           | 4.00  |   | 1.57         |     |
| 0.50       | 8.00                            |           | 3.77  | 3.77                             |  |  | 2.02                                 |           | 3.00  |   | 1.10         |     |
| 0.25       | 6.00                            |           | 2.67  |                                  | 3.00                                   |  | 1.33                                 |           | 2.00  |   | 0.70         |     |
| 0.10       | 3.60                            |           | 1.93  |                                  | 2.00                                   |  | 0.83                                 |           | 1.00  |   | 0.33         |     |
| Min        | 1.00                            |           | 0.33  |                                  | 1.00                                   |  | 0.33                                 |           | 1.00  |   | 0.17         |     |
|            |                                 |           |   |                                  | Top-10                                 | 0% scho  | blars                                |           |   |   |              |     |
|            | QT                              |           | OWQT  |                                  | QM5                                    |  | OWQM5                                |           | QJCR  |   | OWQJCR       |     |
| -          | Liu, P.                         | 33        | Liu, P.   | 13.2                             | Noseworthy, T.                         | 19   | Noseworthy, T.                       | 8.0       | Etkin, J.   | 9 | Etkin, J.    | 5.5 |
|            | Hamby, A.                       | 25        | Hamby, A.   | 10.7                             | Liu, P.                                | 16   | Etkin, J.                            | 8.0       | Yan, D.   | 7 | Yan, D.      | 5.2 |
|            | Noseworthy, T.                  | 24        | Sussman, A.   | 10.1                             | Etkin, J.                              | 14   | Liu, P.                              | 7.4       | Kupor, D.   | 6 | Kupor, D.    | 3.7 |
|            | Sussman, A.                     | 22        | Noseworthy, T.  | 10.0                             | Yan, D.                                | 11   | Yan, D.                              | 7.3       | Noseworthy, T.  | 5 | Rahinel, R.  | 2.7 |
|            | Kupor, D.                       | 20        | Woolley, K.   | 9.7                              | Huang, S.                              | 10   | Sevilla, J.                          | 4.7       | Huang, S.   | 5 | Woolley, K.  | 2.3 |
|            |                                 |           |   |                                  |  |  |                                      |           | Steffel, M.   |   | Chen, Z.     |     |
|            |                                 |           |   |                                  |  |  |                                      |           | Rahinel, R.   |   | Bellezza, S. |     |

#### Seniority Level 1: 10 years and below

#### Seniority Level 2: 11 – 20 years

| Statistics | Total Number of<br>Publications (QT) |    | Authorship-adjusted<br>Number of Publications -<br>Assuming Ordered<br>Authorship (OWQT) |      | Number of Top Marketing<br>Publications (QM5) |         | Authorship-adjusted<br>Number of Top Marketing<br>Publications - Assumping<br>Ordered Authorship<br>(OWQM5) |      | Number of JCR<br>Publications (QJCR)         |    | Authorship-adjusted<br>Number of JCR Publication<br>Assuming Ordered<br>Authorship (OWQJCR) |     |
|------------|--------------------------------------|----|--|------|---|---------|---|------|--|----|---|-----|
| Mean       | 19.23                                |    | 7.47   |      | 8.92  |         | 3.73  |      | 4.37   |    | 1.94  |     |
| S.D.       | 12.27                                |    | 4.33   |      | 5.61  |         | 2.28  |      | 2.82   |    | 1.25  |     |
| Skewness   | 2.31                                 |    | 2.04   |      | 1.54  |         | 1.62  |      | 1.51   |    | 1.36  |     |
| Max        | 87.00                                |    | 28.05  |      | 33.00   |         | 14.92   |      | 18.00  |    | 7.97  |     |
| 0.90       | 34.00                                |    | 12.60  |      | 16.00   |         | 6.35  |      | 8.00   |    | 3.70  |     |
| 0.75       | 23.00                                |    | 8.49   |      | 11.00   |         | 4.80  |      | 6.00   |    | 2.50  |     |
| 0.50       | 16.00                                |    | 6.38   |      | 8.00  |         | 3.22  |      | 4.00   |    | 1.67  |     |
| 0.25       | 12.00                                |    | 4.87   |      | 5.00  |         | 2.17  |      | 2.00   |    | 1.00  |     |
| 0.10       | 8.80                                 |    | 3.44   |      | 3.00  |         | 1.25  |      | 1.00   |    | 0.53  |     |
| Min        | 4.00                                 |    | 1.63   |      | 1.00  |         | 0.50  |      | 1.00   |    | 0.10  |     |
|            |                                      |    |  |      | Top-10  | )% scho | lars  |      |  |    |   |     |
|            | QT                                   |    | QT OWQT  |      | QM5   |         | OWQM5   |      | QJCR   |    | OWQJCR  |     |
|            | Rucker, D. D.                        | 87 | Rucker, D. D.  | 28.0 | Berger, J.                                    | 33      | Berger, J.  | 14.9 | Berger, J.                                   | 18 | Berger, J.  | 8.0 |
|            | Tormala, Z.                          | 66 | Berger, J.   | 24.4 | Haws, K. L.                                   | 29      | Lamberton, C.   | 11.3 | Argo, J. J.                                  | 15 | Argo, J. J.   | 6.2 |
|            | Haws, K. L.                          | 58 | Tormala, Z.  | 23.5 | Argo, J. J.                                   | 26      | White, K.   | 11.0 | Lamberton, C.                                | 10 | Aggarwal, P. J.   | 4.7 |
|            | Morewedge, C. K.                     | 55 | Newman, G.   | 21.0 | Rucker, D. D.                                 | 25      | Argo, J. J.   | 9.9  | Haws, K. L.                                  | 10 | Lamberton, C.   | 4.6 |
|            | Pandelaere, M.                       | 55 | Morewedge, C. K.   | 20.4 | White, K.                                     | 24      | Haws, K. L.   | 9.7  | Rucker, D. D.                                | 10 | Lalwani, A.   | 4.3 |
|            | Newman, G.                           | 54 | Haws, K. L.  | 18.1 | Lamberton, C.                                 | 24      | Rucker, D. D.   | 8.9  | Holmes, C. M.                                | 10 | Hamilton, R.  | 4.2 |
|            | Berger, J.                           | 52 | White, K.  | 17.5 | Reczek, R. W.                                 | 22      | Hamilton, R.  | 8.3  | White, K.                                    | 9  | Holmes, C. M.   | 4.0 |
|            | White, K.                            | 44 | Alter, A.  | 16.2 | Duhachek, A.                                  | 21      | Duhachek, A.  | 8.2  | Mukhopadhyay, A.                             | 9  | Wan, E. W.  | 4.0 |
|            | John, L.                             | 43 | Pandelaere, M.   | 15.8 | Hamilton, R.                                  | 20      | Schweidel, D.   | 7.6  | Bagchi, R.                                   | 9  | Haws, K. L.   | 4.0 |
|            | Lamberton, C.                        | 38 | Lamberton, C.  | 14.8 | Winterich, K. P.                              | 19      | Cheema, A.  | 7.5  | Wan, E. W.                                   | 9  | Labroo, A. A.   | 3.8 |
|            | Patrick, V.                          | 37 | John, L.   | 14.6 | Schweidel, D.                                 | 19      | Labroo, A. A.   | 7.5  | Jiang, Y.                                    | 9  | Bagchi, R.  | 3.8 |
|            | Redden, J.                           | 36 | Hamilton, R.   | 14.0 | Patrick, V.                                   | 18      | Winterich, K. P.  | 7.4  | Keinan, A.                                   | 9  | Sela, A.  | 3.8 |
|            | Reczek, R. W.                        | 35 | Patrick, V.  | 13.5 | Kramer, T.                                    | 16      | Patrick, V.   | 7.3  | Hamilton, R.                                 | 8  | White, K.   | 3.8 |
|            | Chen, H. A.                          | 35 | Torelli, C.  | 13.5 | Stephen, A. T.                                | 16      | Reczek, R. W.   | 6.9  | Winterich, K. P.                             | 8  | Redden, J.  | 3.7 |
|            | Andrade, E. B.                       | 34 | Argo, J. J.  | 12.8 | Mukhopadhyay, A.                              | 16      | Sela, A.  | 6.4  | Sela, A.                                     | 8  | Mukhopadhyay, A.  | 3.7 |
|            | Argo, J. J.                          | 34 | Gal, D.  | 12.5 | Morales, A.                                   | 16      | Kramer, T.<br>Aggarwal, P. J.<br>Hagtvedt, H.   | 6.3  | Aggarwal, P. J.<br>Agrawal, N.<br>Redden, J. | 8  | Rucker, D. D.   | 3.6 |

|            |                                      |     | Tabl   | e 1. JCF | R/JCP ERB Memb                                | ers' P   | roductivity Met   | trics (N =                                   | 77)                                  |       |   |      |  |
|------------|--------------------------------------|-----|--|----------|---|----------|---|--|--------------------------------------|-------|---|------|--|
| Statistics | Total Number of<br>Publications (QT) |     | Authorship-adjusted<br>al Number of Number of Publications -<br>lications (QT) Assuming Ordered<br>Authorship (OWQT) |          | Number of Top Marketing<br>Publications (QM5) |          | Authorship-adjuste<br>of Top Marketing P<br>- Assumping O<br>Authorship (OV | ed Number<br>Jublications<br>rdered<br>VQM5) | Number of JCR<br>Publications (QJCR) |       | Authorship-adjusted Numbe<br>of JCR Publications -<br>Assuming Ordered Authorsh<br>(OWQJCR) |      |  |
| Mean       | 29.86                                |     | 11.83  |          | 13.97   |          | 6.08  |  | 6.64                                 |       | 2.98  |      |  |
| S.D.       | 17.92                                |     | 5.80   |          | 8.83  |          | 3.71  |  | 4.52                                 |       | 2.27  |      |  |
| Skewness   | 3.19                                 |     | 1.64   | 1.64     |   | 2.16     |   | 1.50   |                                      |       | 1.94  |      |  |
| Max        | 137.00                               |     | 37.50  | 37.50    |   | 56.00    |   | 20.50  |                                      |       | 12.33   |      |  |
| 0.90       | 47.00                                |     | 20.65  | 20.65    |   | 25.20    |   | 10.65  |                                      | 14.50 |   | 5.50 |  |
| 0.75       | 36.50                                |     | 13.91  | 13.91    |   | 17.50    |   | 7.70   |                                      |       | 3.94  |      |  |
| 0.50       | 27.00                                |     | 10.55  |          | 13.00   |          | 5.57  |  | 5.50                                 |       | 2.68  |      |  |
| 0.25       | 18.50                                |     | 7.90   |          | 9.00  |          | 3.53  |  | 3.75                                 |       | 1.43  |      |  |
| 0.10       | 13.00                                |     | 6.20   |          | 5.00  |          | 2.20  |  | 1.50                                 |       | 0.55  |      |  |
| Min        | 11.00                                |     | 3.97   |          | 2.00  |          | 0.80  |  | 1.00                                 |       | 0.17  |      |  |
|            |                                      |     |  |          | Top-:   | 10% scho | blars   |  |                                      |       |   |      |  |
| _          | QT                                   |     | OWQT   |          | QM5   |          | OWQM5   |  | QJCR                                 |       | OWQJCR  |      |  |
|            | Vohs, K.                             | 137 | Vohs, K.   | 37.5     | Dahl, D. W.                                   | 56       | Chernev, A.   | 20.5   | Thompson, C.                         | 21    | Thompson, C.  | 12.3 |  |
|            | Dahl, D. W.                          | 78  | Russell, C.  | 24.4     | Dhar, R.                                      | 47       | Dhar, R.  | 17.4   | Dahl, D. W.                          | 19    | Chernev, A.   | 12.2 |  |
|            | Dhar, R.                             | 61  | Dahl, D. W.  | 24.0     | Johar, G. V.                                  | 27       | Dahl, D. W.   | 16.1   | Shiv, B.                             | 17    | Pham, M. T.   | 7.7  |  |
|            | Russell, C.                          | 58  | Raghubir, P.   | 23.1     | Shiv, B.                                      | 27       | Thompson, C.  | 13.8   | Dhar, R.                             | 16    | Shiv, B.  | 6.4  |  |
|            | Verlegh, P.                          | 51  | Chernev, A.  | 22.7     | Chernev, A.                                   | 26       | Pham, M. T.   | 13.5   | Pham, M. T.                          | 16    | Sengupta, J.  | 5.7  |  |
|            | Estes, Z.                            | 47  | Dhar, R.   | 22.5     | Pham, M. T.                                   | 26       | Johar, G. V.  | 11.5   | Johar, G. V.                         | 16    | Johar, G. V.  | 5.6  |  |
|            | Pauwels, K.                          | 47  | Shrum, L.J.  | 21.1     | Sengupta, J.                                  | 26       | Sengupta, J.  | 10.7   | Sengupta, J.                         | 15    | Dahl, D. W.   | 5.5  |  |
|            | Shiv, B.                             | 47  | Thompson, C.   | 20.5     | Nowlis, S. M.                                 | 25       | Schlosser, A.   | 10.6   | Chernev, A.                          | 14    | Dhar, R.  | 5.5  |  |
|            | Shrum, L.J.                          |     |  |          |   |          |   |  |                                      |       |   |      |  |

#### Seniority Level 3: 21 – 30 years

#### Seniority Level 4: 31 years and above

|            |                                 |  | Table 1        | L. JCR                                       | /JCP ERB Members'                             | Pr   | oductivity Meti                       | rics (N =                            | 54)             |  |                 |      |
|------------|---------------------------------|--|----------------|--|---|------|---------------------------------------|--------------------------------------|-----------------|--|-----------------|------|
| Statistics | Total Number of Publications (Q | Authorship-adjusted           Fotal Number of         Number of Publications -           Publications (QT)         Assuming Ordered           Authorship (OWQT)         40.514 |                | Number of Top Marketin<br>Publications (QM5) | Number of Top Marketing<br>Publications (QM5) |      | Number<br>blications<br>lered<br>QM5) | Number of JCR<br>Publications (QJCR) |                 | Authorship-adjusted Numbe<br>of JCR Publications -<br>Assuming Ordered Authorshi<br>(OWQJCR) |                 |      |
| Mean       | 49.63                           |  | 19.51          |  | 21.57   |      | 9.26                                  |                                      | 9.68            |  | 4.44            |      |
| S.D.       | 40.60                           |  | 13.77          |  | 12.05   |      | 5.21                                  |                                      | 6.49            |  | 3.16            |      |
| Skewness   | 2.97                            |  | 2.07           |  | 1.08  |      | 1.03                                  |                                      | 1.80            |  | 2.04            |      |
| Max        | 230.00                          |  | 68.00          |  | 56.00   |      | 23.83                                 |                                      | 35.00           |  | 16.83           |      |
| 0.90       | 86.50                           |  | 37.29          |  | 41.00   |      | 19.14                                 |                                      | 17.60           |  | 8.28            |      |
| 0.75       | 57.25                           |  | 21.74          |  | 27.50   |      | 11.62                                 |                                      | 12.00           |  | 5.14            |      |
| 0.50       | 40.00                           |  | 15.72          |  | 19.00   |      | 7.93                                  |                                      | 7.00            |  | 3.57            |      |
| 0.25       | 25.50                           |  | 10.84          |  | 12.75   |      | 5.86                                  |                                      | 6.00            |  | 2.73            |      |
| 0.10       | 18.50                           |  | 8.37           |  | 9.50  |      | 3.80                                  |                                      | 4.00            |  | 1.85            |      |
| Min        | 13.00                           |  | 4.03           |  | 1.00  |      | 0.40                                  |                                      | 1.00            |  | 0.17            |      |
|            |                                 |  |                |  | Top-10% s                                     | chol | ars                                   |                                      |                 |  |                 |      |
|            | QT                              |  | OWQT           |  | QM5   |      | OWQM5                                 |                                      | QJCR            |  | OWQJCR          |      |
| -          | Petty, R.                       | 230  | Schwarz, N.    | 68.0   | Lehmann, D. R. 5                              | 6    | Krishna, A.                           | 23.8                                 | Janiszewski, C. | 35   | Belk, R. W.     | 16.8 |
|            | Schwarz, N.                     | 208  | Petty, R.      | 65.1   | Krishna, A. 5                                 | 2    | Janiszewski, C.                       | 21.4                                 | Belk, R. W.     | 29   | Janiszewski, C. | 15.0 |
|            | Lehmann, D. R.                  | 122  | Belk, R. W.    | 54.4   | Janiszewski, C. 5                             | 1    | Simonson, I.                          | 21.2                                 | Lynch, J.       | 22   | Bettman, J. R.  | 10.0 |
|            | Belk, R. W.                     | 111  | Hill, R.       | 50.4   | Bettman, J. R. 4                              | 4    | Bettman, J. R.                        | 19.6                                 | Bettman, J. R.  | 21   | Lynch, J.       | 9.5  |
|            | Hill, R.                        | 99   | Lehmann, D. R. | 41.5   | Simonson, I. 4                                | 4    | Lehmann, D. R.                        | 19.4                                 | Krishna, A.     | 18   | Richins, M.     | 9.0  |





# Web Appendix 4: Table 2'—JCR/JCP Board Members' Citation-based Metrics by Cohort

| Seniority Level 1: 10 ye | ears and below |
|--------------------------|----------------|
|--------------------------|----------------|

|            |                                  | Table 2. JCR/JCP   | ERB Mem | bers' Citation-Ba | ased Me | etrics (N = 52)   |  |                        |    |  |
|------------|----------------------------------|--|---------|-------------------|---------|---|--|------------------------|----|--|
| Statistics | Total Number of Citation<br>(CT) | Authorship-adjusted Total<br>(CT)<br>Authorship-adjusted Total<br>Number of Citations, Assuming<br>Ordered Authorship (OWCT) |         |                   |         | Authorship-adjusted<br>of Citations of Top N<br>Publications, Ass<br>Ordered Autho<br>(OWCM5) | d Number<br>Marketing<br>suming<br>rship | H-Index                |    |  |
| Mean       | 247                              | 107  |         | 142               |         | 69  | 6.15                                     |                        |    |  |
| S.D.       | 185                              | 68   |         | 119               |         | 57  |  | 2.87                   |    |  |
| Skewness   | 1.72                             | 0.58   |         | 1.66              |         | 1.38  |  | 0.39                   |    |  |
| Max        | 901                              | 264  |         | 538               |         | 236   |  | 13.00                  |    |  |
| 0.90       | 551                              | 209  | Nam     | e Box 330         |         | 152   |  | 10.00                  |    |  |
| 0.75       | 286                              | 157  |         | 184               |         | 85  |  | 8.00                   |    |  |
| 0.50       | 211                              | 94   | 94      |                   |         | 52  |  | 6.00                   |    |  |
| 0.25       | 115                              | 48   |         | 60                |         | 25  |  | 4.00                   |    |  |
| 0.10       | 78                               | 31   |         | 36                |         | 19  |  | 2.00                   |    |  |
| Min        | 7                                | 2  |         | 7                 |         | 2   |  | 1.00                   |    |  |
|            |                                  |  | Тс      | pp-10% scholars   |         |   |  |                        |    |  |
|            | СТ                               | OWCT   |         | CM5               |         | OWCM5   |  | H-Index                |    |  |
|            | Packard, G. 90                   | 1 Noseworthy, T.   | 264     | Noseworthy, T.    | 538     | Chen, Z.  | 236                                      | Noseworthy, T.         | 13 |  |
|            | Liu, P. 77                       | 1 Barasch, A.  | 252     | Bonezzi, A.       | 522     | Etkin, J.   | 220                                      | Liu, P.                | 13 |  |
|            | Noseworthy, T. 65                | 7 Chen, Z.   | 242     | Etkin, J.         | 356     | Noseworthy, T.  | 217                                      | Barasch, A.            | 12 |  |
|            | Barasch, A. 61                   | 9 Etkin, J.  | 227     | Babic Rosario, A. | 348     | Packard, G.   | 160                                      | Etkin, J.              | 10 |  |
|            | Bonezzi, A. 61                   | 1 Liu, P.  | 214     | Chen, Z.          | 333     | Barasch, A.   | 155                                      | Huang, S.<br>Steffel M | 10 |  |

#### Seniority Level 2: 11 – 20 years

|            |                            | 1        | able 2. JCR/JCP  | ERB Mem                              | bers' Citation-Ba                       | ased Met                  | rics (N = 157)  |   |                  |    |
|------------|----------------------------|----------|--|--------------------------------------|---|---------------------------|---|---|------------------|----|
| Statistics | Total Number of Ci<br>(CT) | itations | Authorship-adjus<br>Number of Citations<br>Ordered Authorshi | ted Total<br>, Assuming<br>ip (OWCT) | Number of Citatio<br>Marketing Publicat | ons of Top<br>tions (CM5) | Authorship-adjuste<br>of Citations of Top I<br>Publications, As<br>Ordered Autho<br>(OWCM5) | d Number<br>Marketing<br>suming<br>orship | H-Index          |    |
| Mean       | 1401.09                    |          | 430.85   |                                      | 571.09                                  |                           | 262.08  |   | 11.93            |    |
| S.D.       | 1237.22                    |          | 468.14   |                                      | 595.04                                  |                           | 307.31  |   | 5.62             |    |
| Skewness   | 5.65                       |          | 4.32   |                                      | 3.36                                    |                           | 4.49  |   | 1.46             |    |
| Max        | 12461.00                   |          | 3732.79  |                                      | 4951.00                                 | )                         | 2837.01   |   | 38.00            |    |
| 0.90       | 2267.80                    |          | 857.60   |                                      | 1250.20                                 | )                         | 597.84  |   | 19.20            |    |
| 0.75       | 1249.00                    |          | 519.47   |                                      | 722.75                                  |                           | 317.22  |   | 14.00            |    |
| 0.50       | 728.00                     |          | 317.13   |                                      | 383.00                                  |                           | 173.48  |   | 11.00            |    |
| 0.25       | 413.00                     |          | 169.60   |                                      | 204.75                                  |                           | 94.17   |   | 8.00             |    |
| 0.10       | 219.20                     |          | 99.05  |                                      | 107.40                                  |                           | 49.37   |   | 6.00             |    |
| Min        | 64.00                      |          | 25.33  |                                      | 9.00                                    |                           | 3.50  |   | 3.00             |    |
|            |                            |          |  | Тс                                   | p-10% scholars                          |                           |   |   |                  |    |
| 1          | СТ                         |          | OWCT   |                                      | CM5                                     |                           | OWCM5   |   | H-Index          |    |
|            | Rucker, D. D.              | 12461    | Rucker, D. D.  | 3733                                 | Berger, J.                              | 4951                      | Berger, J.  | 2837                                      | Rucker, D. D.    | 38 |
| 1          | Berger, J.                 | 5599     | Berger, J.   | 3493                                 | White, K.                               | 2333                      | White, K.   | 1226                                      | Tormala, Z.      | 31 |
| 1          | White, K.                  | 3731     | White, K.  | 1564                                 | Reczek, R. W.                           | 2194                      | Thomson, M.   | 1098                                      | Berger, J.       | 28 |
| 1          | Tormala, Z.                | 3453     | Alter, A.  | 1306                                 | Rucker, D. D.                           | 2106                      | Aggarwal, P. J.   | 995                                       | Newman, G.       | 28 |
| 1          | Schreier, M.               | 3114     | Tormala, Z.  | 1282                                 | Thomson, M.                             | 1960                      | Rucker, D. D.   | 892                                       | White, K.        | 26 |
| 1          | Plassmann, H.              | 2886     | Thomson, M.  | 1152                                 | Stephen, A. T.                          | 1834                      | Lamberton, C.   | 828                                       | Morewedge, C. K. | 25 |
| 1          | John, L.                   | 2769     | Morewedge, C. K.   | 1101                                 | Duhachek, A.                            | 1813                      | Stephen, A. T.  | 781                                       | Pandelaere, M.   | 24 |
| 1          | Morewedge, C. K.           | 2714     | Plassmann, H.  | 1037                                 | Argo, J. J.                             | 1726                      | Bardhi, F.  | 749                                       | Haws, K. L.      | 23 |
| 1          | Reczek, R. W.              | 2697     | Aggarwal, P. J.  | 1034                                 | Lamberton, C.                           | 1721                      | Giesler, M.   | 739                                       | Reczek, R. W.    | 22 |
| 1          | Stephen, A. T.             | 2572     | John, L.   | 1009                                 | Morales, A.                             | 1650                      | Reczek, R. W.   | 720                                       | Argo, J. J.      | 22 |
| 1          | Newman, G.                 | 2548     | Schreier, M.   | 978                                  | Winterich, K. P.                        | 1589                      | Argo, J. J.   | 695                                       | Stephen, A. T.   | 21 |
| 1          | Mead, N.                   | 2485     | Newman, G.   | 955                                  | Grohmann, B.                            | 1405                      | Winterich, K. P.  | 690                                       | Winterich, K. P. | 21 |
| 1          | Cheema, A.                 | 2477     | Stephen, A. T.   | 932                                  | Labroo, A. A.                           | 1321                      | Duhachek, A.  | 689                                       | Duhachek, A.     | 21 |
|            | Alter, A.                  | 2410     | Lamberton, C.  | 873                                  | Aggarwal, P. J.                         | 1310                      | Humphreys, A.   | 687                                       | Alter, A.        | 21 |
|            | Grohmann, B.               | 2311     | Bardhi, F.   | 866                                  | Haws, K. L.                             | 1260                      | Labroo, A. A.   | 616                                       | Patrick, V.      | 20 |
| ]          | Duhachek, A.               | 2257     | Reczek, R. W.  | 855                                  | Arsel, Z.                               | 1246                      | Haws, K. L.   | 590                                       | Plassmann, H.    | 19 |
|            |                            |          |  |                                      |   |                           |   |   | Schreier, M.     |    |

|  |  | Та  | able 2. JCR/JCP I  | ERB Mem                             | bers' Citation-E   | Based Me                 | etrics (N = 77)  |   |   |    |
|--|--|---|--|-------------------------------------|--|--------------------------|--|---|---|----|
| Statistics   | Total Number of Ci<br>(CT)   | itations  | Authorship-adjus<br>Number of Citations<br>Ordered Authorshi | ted Total<br>, Assuming<br>p (OWCT) | Number of Citatic<br>Marketing Publicat  | ons of Top<br>ions (CM5) | Authorship-adjuste<br>of Citations of Top I<br>Publications, As:<br>Ordered Autho<br>(OWCM5) | d Number<br>Marketing<br>suming<br>orship | H-Index   |    |
| Mean   | 2703.38  |   | 1194.66  |                                     | 1648.22  |                          | 799.53   |   | 18.53   |    |
| S.D.   | 2770.43  |   | 1112.59  |                                     | 1456.84  |                          | 792.98   |   | 8.52  |    |
| Skewness   | 3.47   |   | 2.23   |                                     | 1.52   |                          | 1.91   |   | 2.08  |    |
| Max<br>0.90<br>0.75<br>0.50<br>0.25<br>0.10<br>Min | 18923.00<br>5490.20<br>3149.00<br>1878.00<br>1270.50<br>603.40<br>380.00 | 2770.43<br>3.47<br>18923.00<br>5490.20<br>3149.00<br>1878.00<br>1270.50<br>603.40<br>380.00 |  | Tc                                  | 6313.00<br>3980.20<br>2265.50<br>1150.00<br>562.00<br>286.20<br>69.00<br>pp-10% scholars |                          | 3824.50<br>1906.00<br>1062.40<br>499.97<br>274.67<br>153.63<br>25.60                         |   | 62.00<br>29.00<br>23.00<br>17.00<br>13.00<br>9.80<br>7.00 |    |
| 1  | СТ   |   | OWCT   |                                     | CM5  |                          | OWCM5  |   | H-Index   |    |
|  | Vohs, K.   | 18923   | Vohs, K.   | 5886                                | Bhattacharya, C.   | 6313                     | Thompson, C.   | 3824                                      | Vohs, K.  | 62 |
|  | Bhattacharya, C.   | 11803   | Bhattacharya, C.   | 5094                                | Thompson, C.   | 5932                     | Kozinets, R. V.  | 3325                                      | Dahl, D. W.   | 40 |
|  | Sen, S.  | 9997  | Thompson, C.   | 4028                                | Dhar, R.   | 5799                     | Dhar, R.   | 2891                                      | Dhar, R.  | 38 |
|  | Dhar, R.   | 6874  | Kozinets, R. V.  | 3769                                | Kozinets, R. V.  | 4869                     | Escalas, J. E.   | 2762                                      | Pauwels, K.   | 32 |
|  | Thompson, C.   | 6356  | Sen, S.  | 3684                                | Rindfleisch, A.  | 4864                     | Bhattacharya, C.   | 2712                                      | Pham, M. T.   | 29 |
|  | Kozinets, R. V.  | 5870  | Dhar, R.   | 3387                                | Dahl, D. W.  | 4748                     | Sen, S.  | 2289                                      | Shiv, B.  | 29 |
|  | Dahl, D. W.  | 5635  | Escalas, J. E.   | 3145                                | Sen, S.  | 4681                     | Rindfleisch, A.  | 2224                                      | Raghubir, P.  | 29 |
|  | Lee, A. Y.   | 5454  | Lee, A. Y.   | 2403                                | Escalas, J. E.   | 3805                     | Chernev, A.  | 1827                                      | Shrum, L.J.   | 29 |

#### Seniority Level 3: 21 - 30 years

#### Seniority Level 4: 31 years and above

|  |   | Та    | ble 2. JCR/JCP E  | RB Mem                         | bers' Citation-B   | ased Me                | etrics (N = 54)  |                                      |   |    |
|--|---|-------|---|--------------------------------|--|------------------------|--|--------------------------------------|---|----|
| Statistics   | Total Number of Citat<br>(CT)   | tions | Authorship-adjust<br>Number of Citations,<br>Ordered Authorship | ed Total<br>Assuming<br>(OWCT) | Number of Citation<br>Marketing Publicati                                | ns of Top<br>ons (CM5) | Authorship-adjusted<br>of Citations of Top M<br>Publications, Assu<br>Ordered Author:<br>(OWCM5) | Number<br>Iarketing<br>Iming<br>ship | H-Index   |    |
| Mean   | 5906.04   |       | 2598.10   |                                | 3660.04  |                        | 1735.65  |                                      | 27.94   |    |
| S.D.   | 5521.97   |       | 2482.18   |                                | 2566.20  |                        | 1549.28  |                                      | 13.47   |    |
| Skewness   | 2.66  |       | 2.53  |                                | 1.05   |                        | 2.81   |                                      | 1.80  |    |
| Max<br>0.90<br>0.75<br>0.50<br>0.25<br>0.10<br>Min | 29786.00         12603.52           11909.00         5163.77           6839.00         2844.63           4370.00         2017.47           2801.75         1074.08           1489.00         701.02           756.00         302.23 |       |   |                                | 11964.00<br>7292.50<br>4955.25<br>3470.50<br>1599.50<br>794.00<br>127.00 |                        | 9615.17<br>3505.87<br>2093.37<br>1522.37<br>706.25<br>278.62<br>50.80                            |                                      | 81.00<br>43.50<br>34.50<br>25.00<br>18.00<br>13.50<br>11.00 |    |
|  |   |       |   | Тс                             | pp-10% scholars  |                        |  |                                      |   |    |
|  | СТ  |       | OWCT  |                                | CM5  |                        | OWCM5  |                                      | H-Index   |    |
|  | Petty, R. 2   | 29786 | Belk, R. W.   | 12604                          | Belk, R. W.  | 11964                  | Belk, R. W.  | 9615                                 | Petty, R.   | 81 |
|  | Schwarz, N. 2   | 26156 | Petty, R.   | 10580                          | Lynch, J.  | 9961                   | Richins, M.  | 5308                                 | Schwarz, N.   | 70 |
|  | Belk, R. W. 1   | 16239 | Schwarz, N.   | 10505                          | Lehmann, D. R.   | 9014                   | Simonson, I.   | 4128                                 | Lehmann, D. R.  | 53 |
|  | Lynch, J. 1   | 12725 | Richins, M.   | 5622                           | Bettman, J. R.   | 7572                   | Lynch, J.  | 3748                                 | Bettman, J. R.  | 45 |
|  | Lehmann, D. R. 1  | 12014 | Bettman, J. R.  | 5201                           | Arnould, E. J.   | 7511                   | Bettman, J. R.   | 3617                                 | Netemeyer, R. G.  | 44 |

Note: Most of the data were recorded between January and March 2022, except for 23 of the 340 researchers whose data were recorded in Spring 2023. For these researchers, the citation counts as of March 2022 were approximated retrospectively by taking one quarter of their total citations for 2022.

## Web Appendix 5: Distributions of Citation-based Metrics across JCR/JCP Board Members (N = 340)



Number of Citations of Top Marketing Citations (CM5)









## Web Appendix 6a: Raw Correlations among Metrics

| Correlations amor                                      | ng Main | Productiv | vity and ( | Citation | Metrics | (unadjus | sted for a | authorsh | ip)     |          |         |           |
|--|---------|-----------|------------|----------|---------|----------|------------|----------|---------|----------|---------|-----------|
|  |         |           |            |          |         |          |            |          |         |          | Peer    |           |
|  | QT      | QM5       | QJCR       | СТ       | CM5     | PI       | MPI        | PIM5     | MPIM5   | H-index  | Esteem  | Seniority |
| Total Number of Publications (QT)                      | 1       | .594***   | .476***    | .874***  | .538*** | .110*    | .123*      | 0.067    | 0.096+  | .930***  | .410*** | .546***   |
| Total Number of Top-5 Marketing Publications (QM5)     |         | 1         | .829***    | .533***  | .729*** | 0.051    | 0.072      | -0.019   | 0.004   | .735***  | .624*** | .599***   |
| Total Number of JCR Publications (QJCR)                |         |           | 1          | .465***  | .672*** | 0.062    | 0.073      | -0.002   | 0.013   | .615***  | .676*** | .531***   |
| Total Number of Citations (CT)                         |         |           |            | 1        | .738*** | .287***  | .306***    | .209***  | .244*** | .877***  | .476*** | .591***   |
| Total Number of Top-5 Marketing Citations (CM5)        |         |           |            |          | 1       | .309***  | .331***    | .240***  | .273*** | 0.698*** | .619*** | .703***   |
| P-index (PI)   |         |           |            |          |         | 1        | .951***    | .881***  | .851*** | .199***  | .098+   | 0.088     |
| P-Index median (MPI)                                   |         |           |            |          |         |          | 1          | .820***  | .830*** | .219***  | .116*   | 0.121*    |
| P-index of Top-5 Marketing Publications (PIM5)         |         |           |            |          |         |          |            | 1        | .956*** | .124*    | 0.073   | 0.018     |
| P-index median of Top-5 Marketing Publications (MPIM5) |         |           |            |          |         |          |            |          | 1       | .158**   | 0.096+  | 0.051     |
| H-index  |         |           |            |          |         |          |            |          |         | 1        | .495*** | .682***   |
| Peer Esteem  |         |           |            |          |         |          |            |          |         |          | 1       | .353***   |
| Seniority  |         |           |            |          |         |          |            |          |         |          |         | 1         |

|   |      |         |         |         |         |         |         |          | Peer    |           |
|---|------|---------|---------|---------|---------|---------|---------|----------|---------|-----------|
|   | OWQT | OWQM5   | OWQJCR  | оwст    | OWCM5   | OWPI    | OWPIM5  | H-index  | Esteem  | Seniority |
| Authorship-adjusted Number of Publications (OWQT)                             | 1    | .641*** | .523*** | .825*** | .593*** | .105+   | 0.062   | .905***  | .472*** | .602***   |
| Authorship-adjusted Number of Top Marketing<br>Publications (OWQM5)           |      | 1       | .829*** | .574*** | .714*** | 0.07    | -0.008  | .673***  | .611*** | .608***   |
| Authorship-adjusted Number of JCR Publications (OWQJCR)                       |      |         | 1       | .551*** | .727*** | 0.093   | 0.019   | .510***  | .610*** | .510***   |
| Authorship-adjusted Total Number of Citations, (OWCT)                         |      |         |         | 1       | .832*** | .309*** | .225*** | .812***  | .519*** | .608***   |
| Authorship-adjusted Number of Citations of Top<br>Marketing Citations (OWCM5) |      |         |         |         | 1       | .316*** | .251*** | 0.601*** | .578*** | .635***   |
| Authorship-adjusted P-Index, (OWPI)   |      |         |         |         |         | 1       | .880*** | .200***  | .115*   | 0.092+    |
| Authorship-adjusted P-Index of Top Marketing<br>Publications (OWPIM5)         |      |         |         |         |         |         | 1       | .124*    | 0.091+  | 0.019     |
| H-index   |      |         |         |         |         |         |         | 1        | .495*** | .682***   |
| Peer Esteem   |      |         |         |         |         |         |         |          | 1       | .353***   |
| Seniority   |      |         |         |         |         |         |         |          |         | 1         |

**Correlations among Main Productivity and Citation Metrics (adjusted for authorship)** 

## Web Appendix 6b: Partial Correlations among Metrics, Controlling for Seniority

| Correlations An   | nong M | lain Produ | ictivity a | nd Citati | ion Metr | rics (una | djusted | for autho | orship) |         |         |
|---|--------|------------|------------|-----------|----------|-----------|---------|-----------|---------|---------|---------|
|   | -      |            | -          |           |          |           |         |           |         |         | Peer    |
|   | QT     | QM5        | QJCR       | СТ        | CM5      | PI        | MPI     | PIM5      | MPIM5   | H-index | Esteem  |
| Total Number of Publications (QT)                         | 1      | .396***    | .265***    | .817***   | .251***  | 0.069     | 0.061   | 0.062     | 0.075   | .912*** | .279*** |
| Total Number of Top-5 Marketing<br>Publications (QM5)     |        | 1          | .753***    | .274***   | .540***  | -0.016    | -0.01   | -0.035    | -0.029  | .558*** | .556*** |
| Total Number of JCR Publications (QJCR)                   |        |            | 1          | .223***   | .497***  | 0.007     | 0.003   | -0.015    | -0.017  | .408*** | .619*** |
| Total Number of Citations (CT)                            |        |            |            | 1         | .559***  | .293***   | .291*** | .251***   | .269*** | .807*** | .356*** |
| Total Number of Top-5 Marketing<br>Citations (CM5)        |        |            |            |           | 1        | .360***   | .356*** | .338***   | .348*** | .416*** | .563*** |
| P-index (PI)  |        |            |            |           |          | 1         | .948*** | .889***   | .854*** | .179**  | 0.081   |
| P-Index median (MPI)                                      |        |            |            |           |          |           | 1       | .819***   | .826*** | .175**  | 0.088   |
| P-index of Top-5 Marketing Publications<br>(PIM5)         |        |            |            |           |          |           |         | 1         | .954*** | .143*   | 0.084   |
| P-index median of Top-5 Marketing<br>Publications (MPIM5) |        |            |            |           |          |           |         |           | 1       | .161**  | 0.095+  |
| H-index   |        |            |            |           |          |           |         |           |         | 1       | .380*** |
| Peer Esteem   |        |            |            |           |          |           |         |           |         |         | 1       |

|   |      |         |         |         |         |         |         |          | Peer    |
|---|------|---------|---------|---------|---------|---------|---------|----------|---------|
|   | OWQT | OWQM5   | OWQJCR  | оwст    | OWCM5   | OWPI    | OWPIM5  | H-index  | Esteem  |
| Authorship-adjusted Number of Publications (OWQT)                             | 1    | .433*** | .318*** | .726*** | .336*** | 0.067   | 0.059   | .852***  | .350*** |
| Authorship-adjusted Number of Top Marketing<br>Publications (OWQM5)           |      | 1       | .760*** | .332*** | .535*** | 0.017   | -0.024  | .445***  | .538*** |
| Authorship-adjusted Number of JCR Publications (OWQJCR)                       |      |         | 1       | .356*** | .607*** | 0.043   | 0.012   | .259***  | .537*** |
| Authorship-adjusted Total Number of Citations,<br>(OWCT)                      |      |         |         | 1       | .726*** | .332*** | .278*** | .687***  | .410*** |
| Authorship-adjusted Number of Citations of Top<br>Marketing Citations (OWCM5) |      |         |         |         | 1       | .355*** | .326*** | 0.295*** | .492*** |
| Authorship-adjusted P-Index (OWPI)  |      |         |         |         |         | 1       | .890*** | .178**   | .100+   |
| Authorship-adjusted P-Index of Top Marketing<br>Publications (OWPIM5)         |      |         |         |         |         |         | 1       | .140*    | 0.102+  |
| H-index   |      |         |         |         |         |         |         | 1        | .380*** |
| Peer Esteem   |      |         |         |         |         |         |         |          | 1       |

## Correlations among Main Productivity and Citation Metrics (adjusted for authorship)



## Web Appendix 7: Internal Consistency of PRj Scores

Web Appendix 8: Correlation between *p*-Index of First k Publications and p-Index of Next k Publications

|                                   | N   | <i>p</i> -Index (based<br>on mean PR <sub>j</sub> ) | Alternative <i>p</i> -<br>Index (based on<br>median PR <sub>j</sub> ) |
|-----------------------------------|-----|---|---|
| First 5 publications vs. Next 5   | 263 | .420***   | .331***   |
| First 6 publications vs. Next 6   | 228 | .434***   | .379***   |
| First 7 publications vs. Next 7   | 202 | .428***   | .323***   |
| First 8 publications vs. Next 8   | 178 | .507***   | .419***   |
| First 9 publications vs. Next 9   | 154 | .498***   | .400***   |
| First 10 publications vs. Next 10 | 133 | .543***   | .436***   |

# Web Appendix 9: Table 3'—JCR/JCP ERB Members' P-Index Statistics and Peer Esteem Scores by Cohort

|            | Table 3. JCR      | JCP ER | B Members' P-Inde                                    | ex Metri             | cs, TOP MKT P-In                         | dex Me         | trics, and Peer Est  | eem Sco                           | res (N = 52)                           |           |
|------------|-------------------|--------|--|----------------------|--|----------------|--|-----------------------------------|--|-----------|
| Statistics | P-Index (PI)      |        | Authorship-adjusted<br>Assuming Ordered Au<br>(OWPI) | P-Index,<br>thorship | P-index of Top Marl<br>Publications (PIN | keting<br>115) | Authorship-adjusted P<br>Top Marketing Public<br>Assuming Ordered Au<br>(OWPIM5) | -Index of<br>cations,<br>thorship | Frequency of Mentions<br>Esteem Survey | ; in 2020 |
| Mean       | 51.01             |        | 50.97  |                      | 54.75                                    |                | 55.22  |                                   | 0.38                                   |           |
| S.D.       | 18.47             |        | 19.16  |                      | 21.25                                    |                | 21.26  |                                   | 0.80                                   |           |
| Skewness   | 0.58              |        | 0.55   |                      | 0.26                                     |                | 0.19   |                                   | 2.09                                   |           |
| Max        | 97.01             |        | 97.01  |                      | 97.01                                    |                | 97.01  |                                   | 3.00                                   |           |
| 0.90       | 79.24             |        | 78.86  |                      | 87.80                                    |                | 88.15  |                                   | 2.00                                   |           |
| 0.75       | 61.71             |        | 64.89  |                      | 68.55                                    |                | 69.86  |                                   | 0.00                                   |           |
| 0.50       | 46.88             |        | 45.51  |                      | 50.09                                    |                | 52.76  |                                   | 0.00                                   |           |
| 0.25       | 39.07             |        | 37.31  |                      | 42.95                                    |                | 41.27  |                                   | 0.00                                   |           |
| 0.10       | 29.44             |        | 29.23  |                      | 30.19                                    |                | 29.37  |                                   | 0.00                                   |           |
| Min        | 16.46             |        | 16.46  |                      | 15.65                                    |                | 14.35  |                                   | 0.00                                   |           |
|            |                   |        | Top-   | 10% schola           | rs                                       |                |  |                                   |  |           |
|            | PI                |        | OWPI   |                      | PIM5                                     |                | OWPIM5   |                                   | Esteem Survey Men                      | ntions    |
|            | Babic Rosario, A. | 97.0   | Babic Rosario, A.                                    | 97.0                 | Babic Rosario, A.                        | 97.0           | Babic Rosario, A.  | 97.0                              | Melumad, S.                            | 3         |
|            | Ward, A.          | 89.1   | Ward, A.   | 89.6                 | Dolbec, P.                               | 94.5           | Dolbec, P.   | 94.5                              | Huang, S.                              | 3         |
|            | Kristofferson, K. | 88.2   | Kristofferson, K.                                    | 89.0                 | Wang, Y.                                 | 89.6           | Wang, Y.   | 90.6                              | Barasch, A.                            | 2         |
|            | Luangrath, A.     | 83.0   | Wang, Y.   | 84.3                 | Woolley, K.                              | 88.6           | Kristofferson, K.  | 89.0                              | Sussman, A.                            | 2         |
|            | Wang, Y.          | 79.7   | Dolbec, P.   | 79.0                 | Kristofferson, K.                        | 88.2           | Woolley, K.  | 88.6                              | Liu, P.                                | 2         |
|            |                   |        |  |                      |  |                |  |                                   | Tully, S.                              |           |

#### Seniority Level 1: 10 years and below

#### Seniority Level 2: 11 – 20 years

#### Table 3. JCR/JCP ERB Members' P-Index Metrics, TOP MKT P-Index Metrics, and Peer Esteem Scores (N = 157)

|            |               |      |                   |          |                   |         | Authorship-adjusted | P-Index |                    |        |
|------------|---------------|------|-------------------|----------|-------------------|---------|---------------------|---------|--------------------|--------|
|            |               |      | Authorship-adjus  | ted P-   | P-index of Ton Ma | rkating | of Top Market       | ing     | Frequency of Menti | onsin  |
| Statistics | P-Index (PI)  |      | Index, Assuming O | rdered   | Publications (P)  | IME)    | Publications, Assu  | uming   | 2020 Ectoom Sur    |        |
|            |               |      | Authorship (OV    | VPI)     | Fublications (F   | 11415)  | Ordered Author      | ship    | 2020 Esteeni Sui   | vey    |
|            |               |      |                   |          |                   |         | (OWPIM5)            |         |                    |        |
| Mean       | 49.90         |      | 49.34             |          | 52.97             |         | 52.74               |         | 0.79               |        |
| S.D.       | 14.31         |      | 15.17             |          | 17.78             |         | 18.85               |         | 2.03               |        |
| Skewness   | 0.03          |      | 0.18              |          | -0.17             |         | -0.09               |         | 4.66               |        |
| Max        | 86.73         |      | 91.35             |          | 98.63             |         | 98.63               |         | 16.00              |        |
| 0.90       | 68.05         |      | 69.55             |          | 74.57             |         | 77.16               |         | 3.00               |        |
| 0.75       | 59.29         |      | 59.97             |          | 66.05             |         | 68.04               |         | 1.00               |        |
| 0.50       | 50.40         |      | 48.29             |          | 53.14             |         | 53.10               |         | 0.00               |        |
| 0.25       | 40.90         |      | 38.44             |          | 42.26             |         | 40.86               |         | 0.00               |        |
| 0.10       | 31.36         |      | 27.90             |          | 28.42             |         | 26.75               |         | 0.00               |        |
| Min        | 13.33         |      | 14.59             |          | 3.72              |         | 3.83                |         | 0.00               |        |
|            |               |      | Top-2             | 10% scho | lars              |         |                     |         |                    |        |
|            | PI            |      | OWPI              |          | PIM5              |         | OWPIM5              |         | Esteem Survey Mer  | ntions |
|            | Arsel, Z.     | 86.7 | Arsel, Z.         | 91.4     | Mead, N.          | 98.6    | Mead, N.            | 98.6    | Berger, J.         | 16     |
|            | Bardhi, F.    | 82.0 | Bardhi, F.        | 86.5     | Scaraboto, D.     | 96.3    | Scaraboto, D.       | 94.4    | Rucker, D. D.      | 13     |
|            | Schreier, M.  | 81.6 | Giesler, M.       | 83.1     | Grohmann, B.      | 93.7    | Arsel, Z.           | 91.4    | Lamberton, C.      | 6      |
|            | Giesler, M.   | 80.1 | Schreier, M.      | 82.2     | Bardhi, F.        | 92.9    | Bardhi, F.          | 90.3    | White, K.          | 5      |
|            | Li, Y.        | 79.4 | Li, Y.            | 79.1     | Plassmann, H.     | 92.9    | Canniford, R.       | 87.6    | Winterich, K. P.   | 5      |
|            | Plassmann, H. | 77.8 | Dubois, D.        | 79.0     | John, L.          | 91.2    | Plassmann, H.       | 84.7    | Keinan, A.         | 5      |
|            | Dubois, D.    | 77.6 | Plassmann, H.     | 78.4     | Arsel, Z.         | 90.7    | John, L.            | 84.4    | Spiller, S.        | 5      |
|            | Canniford, R. | 74.3 | Luedicke, M.      | 77.1     | Dubois, D.        | 89.7    | Basil, D.           | 83.8    | Botti, S.          | 5      |
|            | Fuchs, C.     | 73.7 | Williams, L.      | 75.7     | Stephen, A. T.    | 88.3    | Stephen, A. T.      | 83.6    | Argo, J. J.        | 4      |
|            | Williams, L.  | 72.9 | Fuchs, C.         | 73.2     | Canniford, R.     | 88.3    | Giesler, M.         | 83.2    | Urminsky, O. W.    | 4      |
|            | Deng, X.      | 69.8 | Humphreys, A.     | 71.8     | Thomson, M.       | 86.3    | Gneezy, A.          | 81.0    | Hamilton, R.       | 4      |
|            | Luedicke, M.  | 69.6 | Scaraboto, D.     | 70.9     | Newman, G.        | 86.3    | Dubois, D.          | 80.7    | Stephen, A. T.     | 3      |
|            | Humphreys, A. | 69.2 | Deng, X.          | 70.8     | Chaplin, L. N.    | 85.5    | Grohmann, B.        | 80.0    | Ordabayeva, N.     | 3      |
|            | Ferraro, R.   | 68.7 | Ferraro, R.       | 70.1     | Bollinger, B.     | 84.4    | Bollinger, B.       | 79.3    | Reczek, R. W.      | 3      |
|            | Keinan, A.    | 68.3 | Keinan, A.        | 69.7     | Giesler, M.       | 84.3    | Mende, M.           | 77.2    | Tormala, Z.        | 3      |
|            | Mead, N.      | 68.0 | Aggarwal, P. J.   | 69.5     | Basil, D.         | 83.8    | Thomson, M.         | 77.1    | Puntoni, S.        | 3      |

#### Seniority Level 3: 21 – 30 years

| Statistics | P-Index (PI)     |      | Authorship-adjusted<br>Assuming Ordered Au<br>(OWPI) | P-Index,<br>thorship | P-index of Top Mar<br>Publications (PIN | keting<br>15) | Authorship-adjusted P.<br>Top Marketing Public<br>Assuming Ordered Aut<br>(OWPIM5) | Index of<br>ations,<br>thorship | Frequency of Mentions<br>Esteem Survey | in 2020 |
|------------|------------------|------|--|----------------------|---|---------------|--|---------------------------------|--|---------|
| Mean       | 50.41            |      | 50.35  |                      | 52.57                                   |               | 52.59  |                                 | 1.68                                   |         |
| S.D.       | 11.67            |      | 12.42  |                      | 15.34                                   |               | 16.12  |                                 | 3.73                                   |         |
| Skewness   | 0.23             |      | 0.09   |                      | 0.08                                    |               | 0.10   |                                 | 4.00                                   |         |
| Max        | 76.28            |      | 75.40  |                      | 88.84                                   |               | 89.72  |                                 | 22.00                                  |         |
| 0.90       | 66.52            |      | 67.03  |                      | 72.58                                   |               | 74.68  |                                 | 4.20                                   |         |
| 0.75       | 59.78            |      | 60.83  |                      | 64.55                                   |               | 62.49  |                                 | 2.00                                   |         |
| 0.50       | 48.57            |      | 49.36  |                      | 50.81                                   |               | 51.53  |                                 | 0.00                                   |         |
| 0.25       | 41.61            |      | 40.60  |                      | 42.18                                   |               | 42.10  |                                 | 0.00                                   |         |
| 0.10       | 34.92            |      | 34.60  |                      | 32.66                                   |               | 30.67  |                                 | 0.00                                   |         |
| Min        | 29.25            |      | 26.35  |                      | 15.84                                   |               | 15.33  |                                 | 0.00                                   |         |
|            |                  |      | Top-   | 10% schola           | rs                                      |               |  |                                 |  |         |
|            | PI               |      | OWPI   |                      | PIM5                                    |               | OWPIM5   |                                 | Esteem Survey Men                      | tions   |
|            | Bhattacharya, C. | 76.3 | Kozinets, R. V.                                      | 75.4                 | Eckhardt, G.                            | 88.8          | Brakus, J.   | 89.7                            | Dahl, D. W.                            | 22      |
|            | Kozinets, R. V.  | 74.2 | Bhattacharya, C.                                     | 73.4                 | Brakus, J.                              | 85.0          | Eckhardt, G.   | 88.7                            | Pham, M. T.                            | 20      |
|            | Thompson, C.     | 73.6 | Escalas, J. E.                                       | 73.2                 | Bhattacharya, C.                        | 78.5          | Bhattacharya, C.   | 84.5                            | Thompson, C.                           | 9       |
|            | Campbell, M. C.  | 70.5 | Rindfleisch, A.                                      | 71.4                 | Thompson, C.                            | 77.7          | Kozinets, R. V.  | 78.2                            | Chandon, P.                            | 8       |
|            | Eckhardt, G.     | 70.5 | Thompson, C.   | 70.9                 | Kozinets, R. V.                         | 76.9          | Rindfleisch, A.  | 77.7                            | Dhar, R.                               | 7       |
|            | Rindfleisch, A.  | 67.9 | Campbell, M. C.                                      | 70.7                 | Rindfleisch, A.                         | 74.6          | Thompson, C.   | 77.6                            | Johar, G. V.                           | 6       |
|            | Wong, N.         | 67.3 | Peck, J.   | 69.2                 | Wong, N.                                | 73.0          | Escalas, J. E.   | 75.6                            | Meyvis, T.                             | 5       |
|            | Wertenbroch, K.  | 66.3 | Crockett, D.   | 66.5                 | Peck, J.                                | 72.5          | Wertenbroch, K.  | 74.5                            | Campbell, M. C.<br>Lee, A. Y.          | 4       |
|            |                  |      |  |                      |   |               |  |                                 | Van Osselaer, S. M.J.                  |         |

#### Seniority Level 4: 31 years and above

|            | Table 3. JCF   | r/JCP ER | B Members' P-Inc                                    | dex Metri                | cs, TOP MKT P-I                      | ndex Me          | trics, and Peer Est  | eem Sco                             | res (N = 54)                          |                |
|------------|----------------|----------|---|--------------------------|--------------------------------------|------------------|--|-------------------------------------|---------------------------------------|----------------|
| Statistics | P-Index (PI)   | )        | Authorship-adjusted<br>Assuming Ordered A<br>(OWPI) | l P-Index,<br>Authorship | P-index of Top Ma<br>Publications (P | irketing<br>IM5) | Authorship-adjusted<br>Top Marketing Publi<br>Assuming Ordered A<br>(OWPIM5) | P-Index of<br>cations,<br>uthorship | Frequency of Mention<br>Esteem Survey | s in 2020<br>Y |
| Mean       | 54.70          |          | 54.68   |                          | 56.49                                |                  | 56.62  |                                     | 4.28                                  |                |
| S.D.       | 10.73          |          | 11.41   |                          | 12.76                                |                  | 13.21  |                                     | 7.76                                  |                |
| Skewness   | -0.43          |          | -0.38   |                          | -0.33                                |                  | -0.12  |                                     | 3.51                                  |                |
| Max        | 81.79          |          | 82.94   |                          | 84.11                                |                  | 84.80  |                                     | 46.00                                 |                |
| 0.90       | 68.34          |          | 68.07   |                          | 73.68                                |                  | 74.36  |                                     | 12.50                                 |                |
| 0.75       | 61.00          |          | 61.87   |                          | 65.19                                |                  | 63.52  |                                     | 5.25                                  |                |
| 0.50       | 56.84          |          | 55.17   |                          | 57.31                                |                  | 57.98  |                                     | 1.00                                  |                |
| 0.25       | 48.61          |          | 47.40   |                          | 50.27                                |                  | 46.63  |                                     | 0.00                                  |                |
| 0.10       | 39.27          |          | 38.71   |                          | 39.36                                |                  | 38.73  |                                     | 0.00                                  |                |
| Min        | 26.75          |          | 25.84   |                          | 23.78                                |                  | 27.74  |                                     | 0.00                                  |                |
|            |                |          | То  | p-10% schola             | rs                                   |                  |  |                                     |                                       |                |
|            | PI             |          | OWPI  |                          | PIM5                                 |                  | OWPIM5   |                                     | Esteem Survey Mer                     | ntions         |
|            | Richins, M.    | 81.8     | Richins, M.   | 82.9                     | Richins, M.                          | 84.1             | Richins, M.  | 85.2                                | Lynch, J.                             | 46             |
|            | Arnould, E. J. | 71.0     | Price, L.   | 73.6                     | Batra, R.                            | 77.0             | Batra, R.  | 79.6                                | Belk, R. W.                           | 22             |
|            | Batra, R.      | 70.9     | Batra, R.   | 72.1                     | Goulding, C.                         | 76.3             | Price, L.  | 76.6                                | Bettman, J. R.                        | 21             |
|            | Price, L.      | 70.3     | Hoffman, D.   | 70.7                     | Fischer, E.                          | 76.0             | Goulding, C.   | 76.3                                | Janiszewski, C.                       | 15             |
|            | Kirmani, A.    | 69.1     | Kirmani, A.   | 69.7                     | Price, L.                            | 75.8             | Fischer, E.  | 74.6                                | Simonson, I.                          | 13             |

## Web Appendix 10: Distribution of p-Index Scores



Distribution of p-Index for all Publications (PI) across all JCR/JCP Board Members (N = 340)





Distribution of p-Index for Top Marketing Publication (PIM5) across all JCR/JCP Board Members (N = 340)

Authorship-adjusted P-Index of Top Marketing Publications, Assuming Ordered Authorship (OWPIM5)



# Web Appendix 11: Negative Binomial Regressions of Peer Esteem as a Function of Productivity and Impact (N = 340)

| Model 1A  |                       |  |  |  |   | Model 1B   |                       |  |  |  |  |
|---|-----------------------|--|--|--|---|--|-----------------------|--|--|--|--|
| Parameter   | DF                    | Estimate   | Standard<br>Error  | Wald Chi-<br>Square                    | Pr > ChiSq                                    | Parameter  | DF                    | Estimate   | Standard<br>Error                                      | Wald Chi-<br>Square                    | Pr > ChiSq                                     |
| Intercept   | 1                     | -1.3428  | 0.2756   | 23.74                                  | <.0001  | Intercept  | 1                     | -1.381   | 0.2424   | 32.46                                  | <.0001   |
| QT  | 1                     | 0.0277   | 0.0095   | 8.54                                   | 0.0035  | QM5  | 1                     | 0.0942   | 0.0145   | 42.02                                  | <.0001   |
| СТ  | 1                     | 0.0001   | 0.0001   | 4.67                                   | 0.0308  | CM5  | 1                     | 0.0002   | 0.0001   | 5.3                                    | 0.0214   |
| Seniority   | 1                     | 0.0099   | 0.0138   | 0.51                                   | 0.4746  | Seniority  | 1                     | -0.0123  | 0.012  | 1.05                                   | 0.3046   |
| Dispersion  | 1                     | 2.4977   | 0.3728   |  |   | Dispersion   | 1                     | 1.4478   | 0.275  |  |  |
|   |                       |  |  | BIC                                    | 921.4334                                      |  |                       |  |  | BIC                                    | 871.7016                                       |
|   | Model 2A              |  |  |  |   | Model 2B   |                       |  |  |  |  |
| Parameter   | DF                    | Estimate   | Standard<br>Error  | Wald Chi-<br>Square                    | Pr > ChiSq                                    | Parameter  | DF                    | Estimate   | Standard<br>Error                                      | Wald Chi-<br>Square                    | Pr > ChiSq                                     |
| Intercept   | 1                     | -1.8231  | 0.2275   | 64.21                                  | <.0001  | Intercept  | 1                     | -1.7146  | 0.2142   | 64.06                                  | <.0001   |
| QT  | 1                     | -0.0317  | 0.0118   | 7.18                                   | 0.0074  | QM5  | 1                     | 0.0925   | 0.0159   | 33.9                                   | <.0001   |
| н   | 1                     | 0.1773   | 0.0295   | 36.23                                  | <.0001  | н  | 1                     | 0.0321   | 0.0152   | 4.44                                   | 0.0351   |
| Seniority   | 1                     | -0.0165  | 0.0128   | 1.66                                   | 0.1981  | Seniority  | 1                     | -0.0089  | 0.0116   | 0.59                                   | 0.4415   |
| Dispersion  | 1                     | 1.9100   | 0.3199   |  |   | Dispersion   | 1                     | 1.4798   | 0.2742   |  |  |
|   |                       |  |  | BIC                                    | 895.8894                                      |  |                       |  |  | BIC                                    | 872.0386                                       |
|   |                       | Мо   | del 3A   |  |   |  |                       | Мос  | lel 3B   |  |  |
| Parameter   | DF                    | Estimate   | Standard<br>Error  | Wald Chi-<br>Square                    | Pr > ChiSq                                    | Parameter  | DF                    | Estimate   | Standard<br>Error                                      | Wald Chi-<br>Square                    | Pr > ChiSq                                     |
| Intercept   | 1                     | -2.215   | 0.4732   | 21.91                                  | <.0001  | Intercept  | 1                     | -2.5434  | 0.3963   | 41.18                                  | <.0001   |
| QT  | 1                     | 0.0406   | 0.0078   | 27.41                                  | <.0001  | QM5  | 1                     | 0.1149   | 0.0127   | 81.48                                  | <.0001   |
| PI  | 1                     | 0.0117   | 0.0083   | 1.96                                   | 0.1618  | PIM5   | 1                     | 0.0162   | 0.0061   | 6.94                                   | 0.0084   |
| Seniority   | 1                     | 0.023  | 0.0125   | 3.4                                    | 0.0651  | Seniority  | 1                     | -0.0004  | 0.0104   | 0                                      | 0.9696   |
| Dispersion  | 1                     | 2.5638   | 0.3799   |  |   | Dispersion   | 1                     | 1.4440   | 0.27   |  |  |
|   |                       |  |  | BIC                                    | 924.5272                                      |  |                       |  |  | BIC                                    | 870.4553                                       |
|   | Model 4               |  |  |  |   | Model 5  |                       |  |  |  |  |
| Parameter   | DF                    | Estimate   | Standard<br>Error  | Wald Chi-<br>Square                    | Pr > ChiSq                                    | Parameter  | DF                    | Estimate   | Standard<br>Error                                      | Wald Chi-<br>Square                    | Pr > ChiSq                                     |
|   |                       |  | LIIO   |  |   |  |                       |  |  |  |  |
| Intercept   | 1                     | -2.4426  | 0.3954   | 38.15                                  | <.0001  | Intercept  | 1                     | -2.1304  | 0.4738   | 20.22                                  | <.0001   |
| Intercept<br>QM5  | 1<br>1                | -2.4426<br>0.099   | 0.3954<br>0.0155   | 38.15<br>40.97                         | <.0001<br><.0001                              | Intercept<br>QM5   | 1<br>1                | -2.1304<br>0.1016  | 0.4738<br>0.015  | 20.22<br>45.76                         | <.0001<br><.0001                               |
| Intercept<br>QM5<br>HI                                    | 1<br>1<br>1           | -2.4426<br>0.099<br>0.0245                               | 0.3954<br>0.0155<br>0.0143                               | 38.15<br>40.97<br>2.92                 | <.0001<br><.0001<br>0.0873                    | Intercept<br>QM5<br>CM5                                    | 1<br>1<br>1           | -2.1304<br>0.1016<br>0.0001                                | 0.4738<br>0.015<br>0.0001                              | 20.22<br>45.76<br>2.14                 | <.0001<br><.0001<br>0.1435                     |
| Intercept<br>QM5<br>HI<br>PIM5                            | 1<br>1<br>1<br>1      | -2.4426<br>0.099<br>0.0245<br>0.0139                     | 0.3954<br>0.0155<br>0.0143<br>0.0062                     | 38.15<br>40.97<br>2.92<br>4.96         | <.0001<br><.0001<br>0.0873<br>0.026           | Intercept<br>QM5<br>CM5<br>PIM5                            | 1<br>1<br>1<br>1      | -2.1304<br>0.1016<br>0.0001<br>0.0123                      | 0.4738<br>0.015<br>0.0001<br>0.0066                    | 20.22<br>45.76<br>2.14<br>3.48         | <.0001<br><.0001<br>0.1435<br>0.0619           |
| Intercept<br>QM5<br>HI<br>PIM5<br>Seniority               | 1<br>1<br>1<br>1<br>1 | -2.4426<br>0.099<br>0.0245<br>0.0139<br>-0.009           | 0.3954<br>0.0155<br>0.0143<br>0.0062<br>0.0114           | 38.15<br>40.97<br>2.92<br>4.96<br>0.62 | <.0001<br><.0001<br>0.0873<br>0.026<br>0.4306 | Intercept<br>QM5<br>CM5<br>PIM5<br>Seniority               | 1<br>1<br>1<br>1      | -2.1304<br>0.1016<br>0.0001<br>0.0123<br>-0.0095           | 0.4738<br>0.015<br>0.0001<br>0.0066<br>0.012           | 20.22<br>45.76<br>2.14<br>3.48<br>0.64 | <.0001<br><.0001<br>0.1435<br>0.0619<br>0.4245 |
| Intercept<br>QM5<br>HI<br>PIM5<br>Seniority<br>Dispersion | 1<br>1<br>1<br>1<br>1 | -2.4426<br>0.099<br>0.0245<br>0.0139<br>-0.009<br>1.3851 | 0.3954<br>0.0155<br>0.0143<br>0.0062<br>0.0114<br>0.2638 | 38.15<br>40.97<br>2.92<br>4.96<br>0.62 | <.0001<br><.0001<br>0.0873<br>0.026<br>0.4306 | Intercept<br>QM5<br>CM5<br>PIM5<br>Seniority<br>Dispersion | 1<br>1<br>1<br>1<br>1 | -2.1304<br>0.1016<br>0.0001<br>0.0123<br>-0.0095<br>1.3896 | 0.4738<br>0.015<br>0.0001<br>0.0066<br>0.012<br>0.2671 | 20.22<br>45.76<br>2.14<br>3.48<br>0.64 | <.0001<br><.0001<br>0.1435<br>0.0619<br>0.4245 |



### Web Appendix 12: Authorship-adjusted Quadrant Analysis of Marketing Productivity vs. *p*-Index

## Web Appendix 13: Miscellaneous Questions and Answers about the *p*-Index

#### 1. Should the p-Index be based on the mean or median percentile rank? Does is make much difference?

Both the mean and the median percentile rank of a researcher's articles make sense as a summary of the researcher's profile of scholarship. In theory, one advantage of using the median over the average is that it should make the measure less sensitive to outlier publications with extremely low or extremely high rank. In addition, the median is a more appropriate summary statistic if distribution is significantly skewed. In practice, however, we found that a large majority of the researchers in our sample have symmetric distributions of percentile ranks (PRjs), with 70.2% having skewness coefficients between - 0.50 and +0.50. Of the rest, 20% had negatively skewed distributions of PRjs and 9.7% had positively skewed distributions. Moreover, because PRjs are naturally bounded between 0 and 1, outliers do not distort as much as they do for measures such as citation counts that are unbounded.

On the other hand, the median PRj can be unstable if the number of publications is limited. It is generally accepted that if a parent population is normally distributed, sample means should have smaller standard errors than sample medians. Given that most researchers in our sample have symmetric rather than skewed distributions of percentile ranks, one might expect that this principle would generally apply to the researchers' PRjs. To test this, we estimated the standard errors of median PRjs and mean PRjs by conducting a bootstrapping analysis of every researcher's distribution of PRjs. Consistent with the above-mentioned theoretical principle, we found that, on average, mean PRjs have standard errors that are 30–40% smaller than median PRjs. Therefore, the mean PRj generally provides a more stable estimate of the central tendency of a researcher's distribution of PRjs across articles. This is the reason why, in the paper, we present the *p*-index based on the mean PRj.

In our data, there was a .95 correlation between the mean-based and median-based versions of the pindex both for total publications (PI) and top marketing publications (PIM5). Most of the results reported in the paper were essentially the same with the two versions of the index. However, when using the PI of the first X publications to predict the PI of the next X publications, the mean-based version of the index was a stronger predictor, most likely because a median-based PI tends to be less stable, especially with a limited number of publications.

## 2. Is the p-Index reliable for consumer researchers who are more representative than those appointed to the editorial boards of JCR and JCP?

To investigate this issue, we conducted a small follow-up study (N = 50). As the primary conference in the field, the annual *Association for Consumer Research* conference attracts a broad representation of consumer researchers. The 2019 ACR conference in Atlanta—the last in-person conference before the pandemic—attracted more than 1,200 participants from 41 different countries and featured the work of more than 1,500 researchers (including co-authors). From this list of 1,500 researchers, we randomly selected 50, excluding current members of the editorial boards of *JCR/JCP* and researchers who were graduate students at the time. We then created a dataset of these researchers' publications using the same criteria as in the main study (e.g., publications indexed by WoS, excluding errata). Our analyses

show that more "representative" consumer researchers also exhibit PR<sub>i</sub> that are internally consistent. However, their overall level of internal consistency is somewhat lower than that of the *JCR/JCP* board members in our sample, in part because they have fewer publications on average. As shown in the figure below, among the 30 researchers in this control sample with 5 or more publications, the average



Cronbach's  $\alpha$  for 5 publications was .21; among the 21 researchers with 10 or more publications, the average Cronbach's  $\alpha$  for 10 publications was .35; and among the 16 researchers with 15 or more publications, the average Cronbach's  $\alpha$  for 10 publications was .33. Therefore, the PI still picks up something stable among consumer researchers who are less selected than those in our main sample. However, the signal provided by the PI for more "regular" consumer researchers may be noisier, possibly because "average" researchers may have less defined research approaches than researchers who serve on major editorial boards.

## 3. The *p*-Index is based on percentile ranks among articles published the same year. Wouldn't it be better to extend the window to, for example, three years?

We believe that, conceptually, using a 1-year window is the preferable approach. Expanding the window to, say, 3 years (e.g., 2013–2015) introduces a bias whereby the more recent articles in a 3-year window (e.g., 2015) tend to be penalized in terms of citation rank relative to older articles (e.g., 2013). The bias is not necessarily strong but can be significant, especially with respect to more recent articles for which 1 or 2 years of citations can make a substantial difference. We investigated this issue by performing the following analysis.

We randomly selected a set of 200 articles published in *JCR* prior to 2020 (*JCR* being the primary outlet in which our sample published their work). The selection criteria were the same as for the dataset analyzed in the paper (e.g., we excluded editorials, errata, rejoinders, etc.). For each article selected (e.g., an article published in 2004), we tabulated the percentile rank of its WoS citations: (a) compared to other *JCR* articles published within the same year (2004, as in the standard *p*-index); (b) compared to articles

published in a 3-year window starting with the year of the article's publication (e.g., 2004-2005-2006); (c) compared to articles published in a 3-year window ending with the year of the article's publication (e.g., 2002-2003-2004); and (d) compared to articles published in a 3-year window balanced around the year of the article's publication (2003-2004-2005). We then performed a mixed-model analysis of (b), (c), and (d) in which the three percentile ranks per article were modeled as a function of a window-position fixed effect (beginning year, middle year, final year) and an article-specific random intercept.

The model confirmed that there was a significant effect of window position (t = 9.70, p < .0001), whereby, as one would expect, percentile ranks tended to be lower when the articles were compared to articles published in previous years than when they were compared to articles published in subsequent years. Within a 3-year window, each year of seniority had an average impact of 2.4 percentile points. Still, most of the variance was accounted for by the articles' random intercepts (intraclass correlation = .97). In other words, the article effect was much stronger than the time-window effect, the former accounting for almost all the variance. Our analyses additionally show that there is a .988 correlation between the percentile ranks computed based on same-year articles (as done in the paper) and the estimated article intercepts pooled across the three comparison windows, which could be regarded as a more accurate estimate of each article's "true" percentile value. In other words, even though we prefer to use a 1-year window in our analyses, using a 3-year window would likely not make much of a difference, provided that the relative seniority of the articles is adjusted, which complicates the computations considerably.

## 4. Should the p-index be computed across all publications (or all top marketing publications), as reported in the article, or instead only across the researcher's top publications?

There is logical merit to operationalizing the index based on a researcher's top publications. Such an operationalization would parallel what faculty promotion committees often do when they focus only on a candidate's best papers. However, computing the index only across the researcher's top publications produces a metric with a slightly different meaning than that of the standard *p*-index. The meaning of the alternative index is more akin to that of the *h*-index in that it is a measure of the cumulation of relatively highly cited articles. Moreover, the alternative index has its own problems. The first is that this creates a selection bias that favors researchers who publish a lot because the "top 5" papers of a researcher who has many publications (e.g., 40 publications in total) are bound to be more cited (and ranked higher) on average than the "top 5" papers of a researcher who has fewer publications (e.g., 15 publications in total). At the extreme, one could imagine a prolific researcher who publishes 100 articles, from which only 5 are real "hits" in terms of PRjs. This researcher would score high on the alternative index but would likely be unimpressive on the standard *p*-index, which would be a better reflection of this researcher's true propensity for thought leadership.

In our data, whereas the standard PI has a .11 correlation with the total number of publications (QT), we found that an index based on the researcher's five highest PRj in top marketing publications has a correlation of .40 with QT, which shows that the latter is more sensitive to the sheer productivity of the researcher. A related issue is that computing the index based only on the researcher's top publications creates a bias that favors more senior scholars who tend to have longer publication records. To illustrate: whereas the standard PI has a correlation of .09 with the number of years post PhD, the alternative index based on researchers' top 5 marketing publications has a correlation of .44 (almost five times as high). Finally, this alternative way of computing the index results in a metric that is understandably strongly correlated with the *h*-index (r = .54), whereas we intend the *p*-index to corral information that goes beyond that already provided by the *h*-index.