

INFLUENTIAL *GLOBAL PERSPECTIVES ON ACCOUNTING EDUCATION* ARTICLES, AUTHORS, AND UNIVERSITY FACULTIES: A CITATION ANALYSIS

Daryl M. Guffey

College of Business and Behavioral Science
Clemson University
Clemson, South Carolina
USA

ABSTRACT

This paper ranks the most influential articles, authors, and university faculties based on Google Scholar citations to publications in *Global Perspectives on Accounting Education* (GPAE). All articles published in GPAE in its first 10 volumes are included and four citation metrics are used. Two citation metrics, citation count and citation rate, provide full-credit to each author and university faculty while two citation metrics, scaled citation count and scaled citation rate, prorate the influence of authors and university faculties based on the number of authors. This paper identifies the top 10 articles, top 10 authors, and top 10 university faculties that have made the greatest contribution to the development of GPAE. In addition, both an h-index and m-index for GPAE are computed and compared to the h-index and the m-index of other accounting education journals. Such an analysis provides a useful basis for understanding the direction the journal has taken and how it has contributed to the literature (Meyer and Rigsby, 2001, p. 254).

Key words: Citation analysis, rankings, Google Scholar citations, most-cited papers, most-cited authors, most-cited faculties

Data availability: Data are available from public sources

The author gratefully acknowledges numerous constructive comments from an anonymous review and the editor, Dennis Blaine.

INTRODUCTION

In 2004, *Global Perspectives on Accounting Education* (GPAE) was created as “an academic, peer-reviewed journal that publishes research and instructional resources relevant to accounting faculty and accounting education worldwide” (Bline, 2003). The publication of the 2013 issue marked the completion of the first 10 years of GPAE’s existence. Once an academic journal becomes established, an analysis of its articles, authors, and faculties provides a beneficial retrospective appraisal of the journal’s direction and development (Urbancic, 2009). Typically “single-journal” studies rank both individual and institutional contributions based on publication counts. Studies based on publication counts treat all published articles as equivalent (Dunbar and Weber, 2014). Rankings based on publication counts do not value articles that have significantly influenced the profession (Pickerd et al., 2011). An alternative method of appraising a journal is to focus on influence as measured through citations.

Citations provide an objective and quantifiable measure of a particular paper’s influence on later research (Dunbar and Weber, 2014). Influential works are building blocks for academic inquiry. A retrospective analysis using citations provides the editor with feedback on which articles have most influenced the literature and thus have contributed the most to the establishment and development of the journal. An article with numerous citations indicates a proper decision concerning a scarce resource, journal space. Ranking articles, authors, and faculties based on citations provides useful information to numerous parties. Authors can use citations to indicate their influence on the profession and can report the citations for accreditation purposes, for annual review purposes, for promotion and tenure purposes, and when seeking or maintaining endowed (chaired) research positions. Administrators, such as deans and department heads, can use citations to justify the efforts of their faculty, to argue for more funding, to argue for more positions, and to show donors that their gifts have been influential.

Citation count and citation rate metrics measure influence. Citation count refers to the number of times an article, author, faculty, or journal is cited during the sample period (Dunbar and Weber, 2014, p. 7). Citation count favors older, more established articles regardless of current influence (Garfield, 1986) because more recent articles did not exist and were not available to be cited in previous years (Dunbar and Weber, 2014). Citation count captures the influence over the entire sample period (Dunbar and Weber, 2014). Citation rate refers to the number of times a given work is cited per year since its publication (Dunbar and Weber, 2014, p. 7). Citation rate adjusts for the article’s age (Brown et al., 1987). The “hot topic” phenomenon can affect the citation rate (Dunbar and Weber, 2014). That is, initially many citations occur but the article or topic is quickly ignored and has little long term impact (Brown and Gardner, 1985b). Advantages and disadvantages exist for both metrics because the citation count metric favors older articles and the citation rate metric favors more recent articles and “hot topics.” Both citation count and citation rate are used to identify influential articles, authors, and faculties.

Another consideration needed when performing citation analysis is how to assign credit for citation count and citation rate for each author and faculty. Authors and faculties can be ranked using both full-credit and coauthor-adjusted credit. Full credit gives each author and faculty “full credit” for citation count and citation rate ignoring the number of authors. The two coauthor-adjusted metrics used are scaled citation count and scaled citation rate. When articles have multiple authors, each author and faculty is given $1/n$ of the credit for citation count and citation rate, where n is the number of authors of the paper.

The current study uses the full-credit metrics, citation count and citation rate, to develop a top 10 most influential articles ranking. If the article is ranked in the top 10 by either full-credit metric, it appears in the ranking. In addition, coauthor-adjusted citation metrics, scaled citation count and scaled citation rate, and the full-credit metrics are used to determine a top 10 most influential author ranking and a top 10 most influential university faculty ranking. If the author or university faculty is ranked in the top 10 by either the full-credit metrics or the coauthor-adjusted metrics, the author or university faculty appears in the ranking.

This paper identifies the articles, authors, and faculties that have made the greatest contribution to the development of GPAE. This analysis provides insight into the direction the journal has taken and how it has contributed to the literature (Meyer and Rigsby, 2001, p. 254). This paper identifies (1) the ten most influential GPAE articles, (2) the ten most influential GPAE authors, and (3) the ten most influential GPAE university faculties. In addition, the h-index and the m-index for GPAE is computed and compared to other accounting education journals.

In the next section, a brief literature review discusses citations in general and the use of citations in the accounting literature. Also within this section is a brief discussion about the h-index, the m-index, and the use of Google Scholar. The third section discusses methodology and overall results. The final section provides a summary and limitations.

LITERATURE REVIEW

Citations

One aspect of journal performance citations measure is the dissemination of useful research findings (Garfield, 1979, p. 79). A substantial difference in the citations for two journals, authors, articles, or faculties indicates a significant difference in the quality of the research published (Garfield, 1979, p. 79). Two qualities make citations useful. One quality is that citations reflect credit on the work involved or cited (Garfield, 1979, p. 63). The other quality is that a strong, positive correlation exists between citations and peer judgments (Garfield, 1979, p. 63).

Citation analysis has a rich history in the accounting literature. Citation analysis has determined journal quality, influential faculty, influential articles, and ranked doctoral programs. Citations are a quantitative and objective measure of the influence an article, author, faculty, doctoral program, or journal has on the research paradigm (Dunbar and Weber, 2014). In fact, an individual's citation list may be more important than his/her publication list (Smith, 2004).

Initially, the use of citation analysis in the accounting literature analyzed 17 journals from six countries (McRae, 1974). Later, the research contributions by individual authors, faculties, and doctoral programs (Brown and Gardner, 1985a) and the most influential articles were determined using citations (Brown and Gardner, 1985b; Brown, 1996). Dissertation citations were used to rank the most influential accounting journals (Chan et al., 2009) and citations identified articles that influenced accounting research (Chan and Liano, 2009; Dunbar and Weber, 2014). Furthermore, the general fields of study that influence accounting were determined using citations (Oler et al., 2010). Citations tested whether an article's contribution can be proxied for by the ranking of the journal in which it was published (Chow et al., 2007). These examples illustrate that citations have been used to analyze articles, journals, authors, faculties, doctoral programs, journal rankings, and determine the general fields of study that influence accounting.

h-index and m-index

The h-index provides a robust single-number metric of an individual's, or faculty's, or journal's influence, combining quality with quantity (Hirsch, 2005). The greater the number of influential papers, the higher the h-index. Only two pieces of information are required to compute the h-index. The two pieces of information are (1) the total number of papers published and (2) the number of citations for each paper. The h-index computation requires one to determine the number of citations to each paper published. Next, rank the publications with the most cited publication ranked first, the second most cited publication ranked second, and so forth. The h-index is the rank of the last paper in which the number of citations exceeds or is equal to the ranking of the article. Therefore, the h-index measures both influence and productivity.

For example, assume Researcher 1 has four publications and the most cited publication is cited 20 times, the second most cited publication is cited 17 times, the third most cited publication is cited twice, and the fourth most cited publication is cited once. Researcher 1 has an h-index of two. That is, the second highest ranked publication ($h = 2$) has two or more citations (number of citations ≥ 2) ($17 > 2$), but the third highest ranked publication ($h = 3$) has fewer citations (2) than its rank ($h = 3$) ($3 > 2$). The same h-index would exist if the second most cited article was cited twice because the ranking ($h = 2$) would equal the number of citations (2). The h-index continues to rise as long as the number of citations to an article equals or exceeds the ranking of the article. If Researcher 2 has four publications and each is cited ten times, then he/she has an h-index of four. That is, the fourth highest ranked publication ($h = 4$) has four or more citations (number of citations ≥ 4) ($4 < 10$). The same h-index would exist if the fourth most cited article was cited four times because the ranking ($h = 4$) would equal the number of citations (4). Again, the h-index continues to rise as long as the number of citations to an article equals or exceeds the ranking of the article. Obviously, Researcher 2 published more influential articles than Researcher 1. Table 1 illustrates these examples.

TABLE 1

Computing the h-index: Two Examples

Researcher 1		Researcher 2	
Journal Ranking ¹	Number of Citations ²	Journal Ranking ¹	Number of Citations ²
1 ₃	20	1	10
2	17	2	10
3	2	3 ₃	10
4	1	4	10

¹ The publications are ranked with the most cited publication ranked first, the second most cited publication ranked second, and so forth.

² The number of citations to each paper published.

³ Researcher 1 has an h-index of two. That is, the second publication (h) as two or more citations (number of citations ≥ 2) ($17 > 2$), but the third publication (h) has fewer citations than its rank ($h = 3$) ($3 > 2$).

⁴ Researcher 2 has an h-index of four. That is, the fourth highest ranking publication ($h = 4$) has four or more citations (number of citations ≥ 4) ($4 < 10$).

The m-index is the h-index divided by the number of years since the researcher's or journal's initial publication (Hirsch, 2005). The index normalizes the h-index so that researchers and journals at different stages can be compared. The m-index averages periods of high and low productivity throughout a career or life, which may or may not be reflective of the current situation of the researcher or journal.

Google Scholar

Citations were collected using Google Scholar. Google Scholar use by researchers to assess citations of scholarly articles has increased in recent years (O'Leary, 2008). Google Scholar is stable over time, displays comprehensive coverage, and provides non-biased comparisons within disciplines (Harzing, 2013). O'Leary (2008) found a statistically significant correlation between the number of citations found with Google Scholar and the number of citations found with ISI Web of Knowledge of 0.927. Google Scholar uses all resources found on the internet to collect citations. Therefore, no indexing of journals is required. Any citation found by Google Scholar is captured and reported.

METHODOLOGY AND RESULTS

“Publish or Perish” software by Anne-Wi Harzing (Harzing, 2007) was used to gather citations using Google Scholar. Citation information on 57 articles by 113 individual authors representing 73 employers was collected on May 1 and May 2, 2014. The number of publications per author varied from one publication to three publications. One author published three articles ($1/113 = 0.88\%$), eight authors published two articles ($8/113 = 7.08\%$), and the remaining authors published one article ($104/113 = 92.04\%$).

Two citation metrics were used to determine the most influential articles. They were: (1) total citations since year of publication until May 1 or 2, 2014 (citation count), and (2) citations per year since year of publication until May 1 or 2, 2014 (citation rate). Table 2 ranks the top 10 articles using both citation metrics. Initially, articles are ranked based on citation count. Next, articles ranked in the top 10 using citation rates but not ranked using citation count are ranked. Table 2 ranks 12 articles based on the article ranking in the top 10 by either citation count or citation rate. Eight of the 10 articles ranked in the top 10 based on citation count were published in volumes one through three, verifying that citation count favors older articles. Four of the 10 articles ranked in the top 10 based on citation rate were published in volumes six through eight, providing some indication that citation rate favors more recent articles. Eight of the top 10 articles are ranked in the top 10 by both citation metrics and both citation metrics rank the same article number one. Table 2 lists seven articles that focus on student issues or pedagogy, four articles that focus on faculty issues, and 1 teaching case.¹

¹The seven articles that focus on student issues or pedagogy are Nouri and Shahid (2005), Maas and Leaby (2005), Shawver (2006), Halabi (2006), Ameen, Jackson, and Malgwi (2010), Stuart (2004), and Taylor and Finley (2011). The four articles that focus on faculty issues are Fogarty (2004), Smith and Crumbley (2009), Welsh and Bremser (2005), and Bouilon and Ravenscroft (2010). The teaching case was Cunningham and Harris (2006).

TABLE 2
Top 10 Article Rankings¹
Volumes 1 - 10

Article, Author(s) and Volume	Citation Count <u>(Rank)</u>	Citation Rate <u>(Rank)</u>
“The Effect of PowerPoint Presentations on Student Learning and Attitudes” by Hossein Nouri and Abdus Shahid (Volume 2). ³	36 (1)	4.00 (1)
“Concept Mapping—Exploring Its Value as a Meaningful Learning Tool in Accounting Education” by Jayne D. Maas and Bruce A. Leaugy (Volume 2). ³	22 (2)	2.44 (4)
“Sustained Research Productivity in Accounting: A Study of the Senior Cohort” by Timothy J. Fogarty (Volume 1). ⁴	21 (3)	2.10 (6)
“An Exploratory Study Assessing the Effectiveness of a Professional Responsibility Course” by Tara J. Shawver (Volume 3). ³	17 (4)	2.13 (5)
“Enron and Arthur Andersen: The Case of the Crooked E and the Fallen A” by Gary M. Cunningham and Jean E. Harris (Volume 3). ⁵	15 (5)	1.88 (8)
“Applying an Instructional Learning Efficiency Model to Determine the Most Efficient Feedback for Teaching Introductory Accounting” by Abdel K. Halabi (Volume 3). ³	13 (6) ²	1.63 (9)
“How Divergent Are Pedagogical Views Toward the Fraud/Forensic Accounting Curriculum?” by G. Stevenson Smith and D. Larry Crumbley (Volume 6). ⁴	13 (6) ²	2.60 (3)
“Student Perceptions of Oral Communication Requirements in the Accounting Profession” by Elsie C. Ameen, Cynthia Jackson, and Charles Malgwi (Volume 7). ³	13 (6) ²	3.25 (2)
“The Impact of Immediate Feedback on Student Performance: An Exploratory Study in Singapore” by Iris Stuart (Volume 1). ³	11 (9) ²	1.10 (15)
“Accounting Faculty Research Collaboration: A Study of Relationship Benefits and Gender Differences” by Mary Jeanne Welsh and Wayne G. Bremser (Volume 2). ⁴	11 (9) ²	1.22 (13)
“Adding Value to the Master of Accounting Curriculum Through an International Travel Experience” by Susan Lee Taytlor and Jane B. Finley (Volume 8). ³	6 (15) ²	2.00 (7)
“Undergraduate Preparation and Dissertation Methodologies of Accounting PhDs Over the Past 40 Years” by Marvin Bouilon and Sue Ravenscroft (Volume 7). ⁴	6 (15) ²	1.5 (10)

¹ Rankings are based solely on citations to publications in *Global Perspectives on Accounting Education*.

² Indicates a tie.

³ Student issue or pedagogy.

⁴ Faculty issues.

⁵ Teaching case.

The most influential authors and university faculties were determined using four citation metrics. The citation metrics include two full-credit metrics, citation count and citation rate, and two coauthor-adjusted metrics, scaled citation count and scaled citation rate. The metrics are:

Citation Count	Number of citations since year of publication to May 1 or 2, 2014.
Citation Rate	Number of citations since year of publication divided by the number of years since publication to May 1 or 2, 2014.
Scaled Citation Count	Citation Count divided by the number of authors.
Scaled Citation Rate	Citation Rate divided by the number of authors.

Table 3 provides the top 10 authors for each of the four citation metrics. Column 1 lists the top 10 authors using citation count. Column 2 provides scaled citation counts and the appropriate ranking. If an author ranks in the top 10 based on scaled citation count and is not ranked in Column 1, then he/she is added to the ranking. The same procedure is repeated for Column 3, citation rate, and Column 4, scaled citation rates. Table 3 identifies 15 authors and provides their current institutional affiliation, the four citation metrics, and author rank based on each citation metric. The top six authors as ranked by citation count rank in the top nine using the other three citation metrics. Hossein Nouri and Abdus Shahid have 36 citations while Timothy J. Fogarty has 24 citations, Bruce A. Leauby and Jayne D. Maas have 22 citations, and Charles A. Malgwi 21 citations. Timothy J. Fogarty ranks number one based on two metrics while Hossein Nouri, Abdus Shahid, and Charles A. Malgwi rank number one based on one metric.

Table 3 provides current university affiliation for the “Top 10 Author Rankings.” *Hasselback’s Accounting Directory 2012-2013* was used to establish current university affiliation. Appropriate university websites were examined during May, 2014 to confirm current university affiliation. If the faculty member was retired (emeritus), the last institutional affiliation is provided for the current institutional affiliation.

Table 4 lists the top 10 university faculties published in GPAE based on the four citation metrics. Table 4 incorporates the same technique as Table 3. Table 4 ranks 17 university faculties based on a top 10 ranking under citation count, scaled citation count, citation rate, or scaled citation rate. Authors in GPAE represented 73 individual employers. Two employers were from practice, Allina Hospitals & Clinics and Deloitte and Touché, and 13 employers were non-U.S. universities indicating the international scope of GPAE. The College of New Jersey ranked first under all four metrics. La Salle University, Case Western Reserve University, and Bentley University ranked in the top 10 under all four citation metrics. Three universities in Table 4 are non-U.S. universities providing further evidence of GPAE’s international influence. Table 4 also provides the number of articles authored or coauthored by the university faculties. Eleven university faculties authored or coauthored two articles while two university faculties authored or coauthored three articles.²

²The eleven university faculties with two articles were Belmont University, Bentley University (College), Georgia Institute of Technology, La Salle University, Rider University, St. Cloud State University, University of Calgary, University of Nevada, University of Saskatchewan, University of South Florida, and Villanova University. The two university faculties with three articles were Case Western Reserve University and Northeastern University.

TABLE 3
Top 10 Author Rankings¹
Volumes 1 - 10

Author (Institutional Affiliation) ²	Citation Count (Rank)	Scaled Citation Count (Rank)	Citation Rate (Rank)	Scaled Citation Rate (Rank)
Hossein Nouri (The College of New Jersey)	36 (1) ³	18.00 (2) ³	4.00 (2) ³	2.00 (4) ³
Abdus Shahid (The College of New Jersey)	36 (1) ³	18.00 (2) ³	4.00 (2) ³	2.00 (4) ³
Timothy J. Fogarty (Case Western Reserve University)	24 (3)	22.50 (1)	2.70 (6)	2.40 (1)
Bruce A. Leaby (La Salle University)	22 (4) ³	11.00 (7) ³	2.44 (9) ³	1.22 (9) ³
Jayne D. Maas (Winthrop University)	22 (4) ³	11.00 (7) ³	2.44 (9) ³	1.22 (9) ³
Charles A. Malgwi (Bentley University)	21 (6)	12.33 (6)	4.25 (1)	2.08 (3)
Tara J. Shawver (King's College)	17 (7)	17.00 (4)	2.13 (11)	2.13 (2)
Gary M. Cunningham (Jönköping International Business School)	15 (8) ³	7.50 (10) ³	1.88 (14) ³	0.94 (16) ³
Jean E. Harris (Penn State-Harrisburg) (Emeritus)	15 (8) ³	7.50 (10) ³	1.88 (14) ³	0.94 (16) ³
Abdel K. Halabi (Federation University Australia-Gippsland)	13 (10) ³	13.00 (5)	1.63 (16)	1.63 (6)
G. Stevenson Smith (Southeastern Oklahoma State University)	13 (10) ³	6.5 (12) ³	2.60 (7) ³	1.30 (7) ³
D. Larry Crumbley (Louisiana State University)	13 (10) ³	6.5 (12) ³	2.60 (7) ³	1.30 (7) ³
Elsie C. Ameen (Sam Houston State University)	13 (10) ³	4.33 (19) ³	3.25 (4) ³	1.08 (12) ³
Cynthia Jackson (Northeastern University)	13 (10) ³	4.33 (19) ³	3.25 (4) ³	1.08 (12) ³
Iris Stuart (NHH, Norwegian School of Economics)	11 (15) ³	11 (7) ³	1.1 (34)	1.1 (11)

¹ Rankings are based solely on citations to publications in *Global Perspectives on Accounting Education*.

² Employer was confirmed by searching the appropriate university website during May, 2014.

³ Indicates a tie.

TABLE 4
Top 10 University Faculty Rankings
Volumes 1 - 10

University Faculty Ranking ¹	Citation Count (Rank)	Scaled Citation Count (Rank)	Citation Rate (Rank)	Scaled Citation Rate (Rank)	Number of Articles
The College of New Jersey	72 (1)	36.00 (1)	8.00 (1)	4.00 (1)	1
La Salle University	33 (2)	16.50 (4)	3.66 (5)	1.83 (6)	2 ³
Case Western Reserve University	24 (3)	22.50 (2)	2.70 (10)	2.40 (2)	3 ⁴
Loyola College in Maryland	22 (4)	11.00 (8) ²	2.44 (13)	1.22 (13)	1
Bentley University	21 (5)	12.33 (6)	4.25 (2)	2.08 (5)	2
Western Illinois University	20 (6) ²	3.34 (23) ²	2.86 (8) ²	0.48 (29)	1
Barry University	20 (6) ²	6.66 (13)	2.86 (8) ²	0.96 (17)	1
King's College	17 (8) ²	17.00 (3)	2.13 (14)	2.13 (4)	1
Villanova University	17 (8) ²	11.50 (7)	2.08 (15)	1.47 (9)	2
Northeastern University	16 (10)	5.83 (17)	3.85 (4)	1.38 (10)	3
Monash University, Gippsland	13 (13) ²	13 (5)	1.63 (20)	1.63 (7)	1
California State University, Fullerton	11 (19)	11.00 (9)	1.10 (33)	1.10 (14)	1
Pennsylvania State University, Harrisburg	15 (11) ²	7.50 (10) ²	1.88 (18) ²	0.94 (18) ²	1

(continued)

TABLE 4 (continued)

Abo Akademi University	15 (11) ²	7.50 (10) ²	1.88 (18) ²	0.94 (18) ²	1
Belmont University	13 (13) ²	7.00 (12)	4.17 (3)	2.17 (3)	2
Sam Houston State University	13 (13) ²	4.33 (21)	3.25 (6)	1.08 (15)	1
Calgary	10 (20) ²	5.00 (18)	3.00 (7)	1.50 (8)	2

¹ Rankings are based solely on citations to publications in *Global Perspectives on Accounting Education*.

² Indicates a tie.

³ Eleven university faculties authored or co-authored two articles. The university faculties were Belmont University, Bentley University (College), Georgia Institute of Technology, La Salle University, Rider University, St. Cloud State University, University of Calgary, University of Nevada, University of Saskatchewan, University of South Florida, and Villanova University.

⁴ Two university faculties authored or co-authored three articles. The university faculties were Case Western Reserve University and Northeastern University.

Both an h-index and an m-index are computed for GPAE. The h-index for GPAE is 10 and the m-index is 0.91. “Publish or Perish” software by Anne-Wi Harzing (Harzing, 2007) was used to compute the h-index for *Issues in Accounting Education*, *Journal of Accounting Education*, *Accounting Education: An International Journal*, *Advances in Accounting Education*, and *The AIS Educator Journal*. These accounting education journals are logical benchmarks for GPAE. GPAE ranks fifth among the accounting education journals substantially behind *Issues in Accounting Education* (h-index = 60), *Journal of Accounting Education* (h-index = 47), and *Accounting Education: An International Journal* (h-index = 27), but very close to *Advances in Accounting Education* (h-index = 11) and ahead of *The AIS Educator Journal* (h-index = 3). The four accounting education journals with higher h-indices than GPAE began publication before GPAE and have published more articles. A weakness of the h-index is that it is biased towards larger/older journals over smaller/younger journals because more material has been published by the larger journals and more time has passed for older journals, and therefore more citations should occur (Garfield 1979). That is, citation count favors older, more established articles regardless of current influence (Garfield, 1986) because more recent articles did not exist and were not available to be cited in previous years (Dunbar and Weber, 2014).

The m-index normalizes the h-index so that journals of different life-spans can be compared. The m-index is the h-index divided by the number of years since the journal’s initial publication. The h-indices in Table 5 were divided by 2014 minus the year of initial publication to compute the m-index. Computation of the m-index of 1.88 for *Issues in Accounting Education* was $60/(2014 -$

1983). *Issues in Accounting Education* (m-index = 1.88) and *Journal of Accounting Education* (m-index = 1.47) have substantially higher m-indices than GPAE (m-index = 0.91). However, GPAE's m-index is close to the m-index of *Accounting Education: An International Journal* (m-index = 1.17) and greater than the m-index for *Advances in Accounting Education* (m-index = 0.69) and *The AIS Educator Journal* (m-index = 0.33). Therefore, GPAE ranks fourth among the accounting education journals based on the m-index. Table 5 provides the name of the journal, its initial year of publication, its h-index, and its m-index.

TABLE 5

**h-index and m-index
Computed with Google Scholar**

<u>Journal</u>	<u>Initial Publication</u>	<u>h-index</u> ¹	<u>m-index</u> ²
<i>Issues in Accounting Education</i>	1983	60 ³	1.88
<i>Journal of Accounting Education</i>	1983	47 ³	1.47
<i>Accounting Education: An International Journal</i>	1992	27 ³	1.17
<i>Advances in Accounting Education</i>	1999	11 ³	0.69
<i>Global Perspectives on Accounting Education</i>	2004	10	0.91
<i>The AIS Educator Journal</i>	2006	3 ³	0.33

¹ The h-index computation requires one to determine the number of citations to each paper published. Next, rank the publications with the most cited publication ranked first, the second most cited publication ranked second, and so forth. The journal has an index of h if he/she has published h papers each of which has been cited in other papers at least h times. The h-index of 60 for *Issues in Accounting Education* means that 60 articles from *Issues in Accounting Education* have been cited at least 60 times.

² The m-index is the h-index divided by the number of years since the journal's initial publication (Hirsch, 2005). The index normalizes the h-index so that researchers and journals at different stages can be compared. Computation of the m-index of 1.88 for *Issues in Accounting Education* was $60/(2014 - 1983)$.

³ The h-index was computed using "Publish or Perish" software by Anne-Wi Harzing (Harzing, 2007).

SUMMARY AND CONCLUSIONS

This paper makes several contributions to the literature. First, this paper lists the most cited papers in GPAE based on Google Scholar over the first 10 years of the journal's existence. This paper also categorizes the most cited articles by topic to determine the types of research with the greatest influence on accounting faculty and accounting education worldwide. The rankings and analysis by topic can be used by current faculty whose research interests are in the specific areas the papers cover.

Citations from the first 10 volumes of GPAE found with Google Scholar on May 1 or 2, 2014 identify the top 10 most influential articles, the top 10 most influential authors, and the top 10 most influential university faculties. Furthermore, both an h-index and m-index for GPAE is computed and compared to the h-index and m-index of other accounting education journals.

The top 10 articles based on the full-credit citation metrics of citation count and citation rate are identified. Due to the use of the two full-credit citation metrics and ties, 12 articles appear in the ranking. The ranking confirms that citation count favors older articles while citation rate provides weaker evidence of favoring more recent articles. The top 10 influential articles contains seven articles that focus on student issues or pedagogy, four articles that focus on faculty issues, and 1 teaching case.

Diversity exists among the 113 individual authors representing 73 employers. Over 92% (104/113 = 92.03%) of the authors published only once in GPAE and over 99% (112/113 = 99.12%) published only once or twice. The four citation metrics provide similar author rankings. The top six authors as ranked by citation count rank in the top nine using the other three citation metrics. Hossein Nouri (36), Abdus Shahid (36), Timothy J. Fogarty (24), Bruce A. Leaby (22), Jayne D. Maas (22), and Charles A. Malgwi (21) are the most cited authors based on citation count.

Top 10 faculties were identified using all four citation metrics. This technique produced a ranking that included 17 faculties. Seventy-three individual employers were found with two being from practice. The College of New Jersey ranked first under all four metrics. La Salle University, Case Western Reserve University, and Bentley University ranked in the top 10 under all four citation metrics.

Both an h-index and an m-index are computed for GPAE. The h-index for GPAE is 10 and the m-index is 0.91. The h-index and the m-index were computed for benchmark accounting education journals using "Publish or Perish" software by Anne-Wi Harzing (Harzing, 2007). The benchmark accounting education journals are: *Issues in Accounting Education*, *Journal of Accounting Education*, *Accounting Education: An International Journal*, *Advances in Accounting Education*, and *The AIS Educator Journal*. GPAE ranks fifth among accounting education journals based on the h-index and fourth based on the m-index.

Two limitations must be noted. First, faculties, articles, and individual authors are ranked based solely on citations to articles published in a single journal, GPAE. Deans, administrators, promotion and tenure committees, colleagues, and others are not likely to evaluate university faculties and authors with such a narrow focus. Thus, rankings presented in this paper should be interpreted with caution. Further, the rankings presented in this paper rely solely on citations from a single data source: Google Scholar. The use of this single data source should be taken into consideration when interpreting results.

REFERENCES

- Bline, D. 2003. About the Journal. *Global Perspectives on Accounting Education*.
- Brown, L. 1996. Influential Accounting Articles, Individuals, PhD Granting Institutions and Faculties: A Citation Analysis. *Accounting, Organizations and Society* (Vol. 21, Nos. 7-8) 723-754.
- _____, and J. Gardner. 1985a. Applying Citation Analysis to Evaluate the Research Contributions of Accounting Faculty and Doctoral Programs. *The Accounting Review* (Vol. 80, No. 1) 262-277.

- _____, and _____. 1985b. Using Citation Analysis to Assess the Impact of Journals and Articles on Contemporary Accounting Research (CAR). *Journal of Accounting Research* (Vol. 23, No. 1) 84-109.
- _____, _____, and M. A. Vasarhelyi. 1987. An Analysis of the Research Contributions of *Accounting, Organizations and Society, 1976-1984*. *Accounting, Organizations and Society* (Vol. 12, No. 2) 193-204.
- Chan, K. C., K. C. Chan, G. S. Seow, and K. Tam. 2009. Ranking Accounting Journals Using Dissertation Citation Analysis: A Research Note. *Accounting, Organizations and Society* (Vol. 34, Nos. 6-7) 875-885.
- Chan, K., and K. Liano. 2009. Threshold Citation Analysis of Influential Articles, Journals, Institutions, and Researchers in Accounting. *Accounting and Finance* (Vol. 49, No. 1) 59-74.
- Chow, C., K. Haddad, G. Singh, and A. Wu. 2007. On Using Journal Rank to Proxy for an Article's Contribution or Value. *Issues in Accounting Education* (Vol. 22, No. 3) 411-427.
- Dunbar, A. E., and D. P. Weber. 2014. What Influences Accounting Research? A Citations-Based Analysis. *Issues in Accounting Education* (Vol. 29, No. 1) 1-60.
- Garfield, E. 1979. *Citation Indexing: Its Theory and Application in Science, Technology, and Humanities*. (New York: John Wiley & Sons).
- _____. 1986. Letter to Editor "Journal Impact vs. Influence: A Need for Five-Year Impact Factors." *Information Processing & Management* (Vol. 22, No. 5) 445.
- Harzing, A. 2007. *Publish or Perish*. Available from <http://www.harzing.com/pop.htm>.
- _____. 2013. A Preliminary Test of Google Scholar as a Source for Citation Data: A Longitudinal Study of Nobel Prize Winners. *Scientometrics* (Vol. 94, No. 3) 1057-1075.
- Hasselback, J. 2012. *Accounting Directory: 2012-2013*. (Upper Saddle River, New Jersey: Pearson Prentice Hall and the American Accounting Association).
- Hirsch, J. E. 2005. An Index to Quantify an Individual's Scientific Research Output. *Proceedings of the National Academy of Sciences* (Vol. 102, No. 46) 16569-16572.
- McRae, T. W. 1974. A Citational Analysis of the Accounting Information Network. *Journal of Accounting Research* (Vol. 12, No. 1) 80-92.
- Meyer, M., and J. T. Rigsby. 2001. A Descriptive Analysis of the Content and Contributions of *Behavioral Research in Accounting 1989-1998*. *Behavioral Research in Accounting* (Vol. 13) 253-278.
- O'Leary, D. 2008. The Most Cited Intelligent Systems Articles. *IEEE Intelligent System* (Vol. 23, No. 4) 10-13.
- Oler, D., M. Oler, and C. Skousen. 2010. Characterizing Accounting Research. *Accounting Horizons* (Vol. 24, No. 4) 635-670.
- Pickerd, J., N. Stephens, S. Summers, and D. Wood. 2011. Individual Accounting Faculty Research Rankings by Topical Area and Methodology. *Issues in Accounting Education* (Vol. 26, No. 3) 471-505.
- Smith, S. 2004. Is An Article in a Top Journal a Top Article? *Financial Management* (Vol. 33, No. 4) 133-149.
- Urbancic, F. R. 2009. Individual and Institutional Contributors to Research in Accounting Education. *The Accounting Educators' Journal* (Vol. 19) 21-44.