

## **An Empirical Analysis of the Literature Cited in the *Journal of Leadership Education***

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### **Abstract**

Since 2002, the *Journal of Leadership Education (JOLE)* has served as a primary source for the dissemination of new knowledge in the field of leadership education. The purpose of this study was to empirically analyze sources cited in research features included in the *JOLE* from Volume 1, Issue 1 through Volume 12, Issue 1. A total of 125 research features were analyzed, resulting in 3,497 citations, and yielding an average of 28 citations per research feature. A thorough examination indicated research features of the *JOLE* cite journals and books most frequently, accounting for 86.7% of all citations. The *JOLE* was found to be the most cited journal in research features. Nine books and five journal articles were found to be the most often cited references within the research features in this study. Future research should be conducted to understand the relative contribution of various document types to the overall composition of research features to better understand the relevance of each in today's knowledge base.

### **Introduction**

The main *Journal of Leadership Education (JOLE)* page on the Association of Leadership Educators website (2011) stated, "The purpose of *JOLE* is to provide a forum for development of the knowledge base and practice of leadership education" (para. 1). Based on Carr-Chellman's (2006) supposition, "a deep understanding of any field rests upon a careful examination of its theories, research, and scholarship from many angles" (p. 5), one could argue that a careful review of the *JOLE* could yield a deep understanding of the leadership education discipline. Yet, when justifying the need for the National Leadership Education Research Agenda, Andenoro et al. (2013) noted,

When one attempts to define the merits of a discipline, he or she will normally examine the uniqueness of the body of knowledge represented within that discipline. However, this has historically been a difficult proposition for the field of Leadership Education. (p. 2)

Chandy and Williams (1994) asserted that the knowledge system of a discipline is part of a larger, more general knowledge system. Although Crane (1972) noted, "no research area is completely isolated from other areas" (p. 13), she did differentiate between the diffusion of information across two existing disciplines and a new discipline competing with the older ones. Similarly, Tom Gallagher, the Founding Editor of the *JOLE*, remarked

Leadership education is not easy; it is a complex challenge that requires knowledge and skill. As the two words—leadership education—suggest, it is not a singular focus but sits at the nexus of two disciplines, the art and science of leadership and the art and science of education. These existing disciplines have each developed a substantive body of knowledge. However, within each of these disciplines there is very little specifically about the challenge of “leadership education.” At this nexus the challenge of integration across disciplines creates a special conversation. It is the purpose of *JOLE* to provide a forum for people engaged in leadership education to improve their knowledge and skills through communication with others. (Gallagher, 2002, pp. 3-4)

Professional journals impact how current knowledge is housed and disseminated and can play critical roles in the development and creation of new knowledge (Hodge, Lacasse, & Benson, 2012; Radhakrishna, 1995; Richardson & McLeod, 2009; Tseng, Tung, & Duan, 2010). To foster fruitful discussion in leadership education while providing structure to the journal, the *JOLE* created five paper categories: Research Features, Theory Features, Idea Briefs, Application Briefs, and Commentaries. This classification was not purposed to ensure all articles had a home within the publication, but more to clearly illustrate that articles do not have to fit into the standard research format (Gallagher, 2002).

“As a profession matures, it is common practice to examine the parameters of its knowledge base” (Hodge et al., 2012, p. 766). Goldsmith (1984) identified the examination of structural changes within a discipline’s journal over a set number of years as one possible approach. Similarly, Chandy and Williams (1994) noted the development and progress of a particular discipline can be objectively measured using the citations within articles that are published in the journals within that discipline. As Tseng, Tung, and Duan (2010) phrased it, “one discipline’s journals can be regarded as an ‘invisible hand’ influencing the focus of development and diffusion of the knowledge network of a given field” (p. 58).

“Journals are important channels for the dissemination of research information and are indispensable to educators who are active in research and development and/or teaching” (Radhakrishna, 1995, p. 48). There are numerous outlets for leadership educators to disseminate knowledge related to leadership and education resulting in a substantial growth in the knowledge base. Understanding a journal’s citation patterns can help authors make more informed decisions when deciding to which journal to submit their scholarly work (Richardson & McLeod, 2009).

### **Conceptual Framework**

Goldsmith (1983) argued that some key aspects of a discipline could be objectively measured by analyzing journals because “every journal article provides several pieces of information that can be quantified” (p. 208). Similarly, Schloman (1997) noted:

Because bibliographic references that appear in journal articles provide a measurable path of information transfer occurring within a field, it is possible to assess quantitatively the characteristics of the literature of that field: the type of literature used, its currency, the core journals, and the extent of dispersion of the journal literature. (p. 273)

According to Goldman (1979):

Citations are a popular indicator of the behavior of scholars because they reflect authors' debt to earlier works, constitute a statement as to which of these works are important, and are a means by which authors anchor their work and relate it to earlier research. (p. 485)

Crane (1972) acknowledged the use of citation linkages as an approximate measure of the "intellectual debt" in the absence of "other equally good measures" (p. 20). However, Crane (1972) also pointed out that it was not possible to determine what role individual citations played in the development of an author's work. Some citations in a paper are likely to be more central; whereas, others could play a more peripheral role (Crane, 1972). Radhakrishna (1995) identified four assumptions upon which the use of citation frequency as an index of the cited document is based upon:

1. The journal selected as a source of citations is representative of the discipline;
2. Any well used, subjectively valuable journal in a given discipline may be chosen as a source of counting citations;
3. The number of times a journal is cited is directly proportional to its value or intrinsic worth; and
4. The subject content of the cited document is related to that of the citing document. (p. 49)

Citation frequency has also been used to develop lists of core journals within a field since 1927 when Gross and Gross described the frequency of citations in a single volume of *The Journal of the American Chemical Society*. Given that the *JOLE* is an open access journal and individuals have access to it and others similar to it, it is important that we identify core journals important to the leadership education discipline.

Patterns of journal articles can be telling for a field of study as "the refereed journal article is the gold standard because of its importance to funding agencies and tenure and promotion committees" (De Loë, 2003, p. 351). Empirical analyses using base journals have been conducted in other disciplines. Goldsmith (1983) conducted an empirical analysis of the *Home Economics Research Journal* from 1972-1980. Goldsmith concluded that the mean number of citations per article in the *HERJ* was 16.9 and that books were used most often followed by articles. Interestingly, Goldsmith (1983) concluded, "in recent years, much attention has been placed on changes in the types of publications cited. For the most part, books are being used much less now than in the past and journals much more" (p. 208).

When analyzing the *Journal of Agricultural Education (JAE)* during the decade of the eighties, Radhakrishna (1995) identified 11 core journals that accounted for 51% of the citations within the *JAE*. Radhakrishna (1995) also reported that during the time of review, 26% of the documents cited in *JAE* articles were journal articles, 24% were books, 23% were bulletins/reports, 13% were dissertations/theses, 8% were magazines, and 6% per conference papers or proceedings.

Edgar and Cox (2010) analyzed the citation structure of the *JOLE* during the first five years of the journal's existence. However, some of Edgar and Cox's (2010) findings were difficult to examine in aggregate as they separated 75 references made to premier journals in

agricultural education, representing 9.60% of the total cited literature in the *JOLE*, from the remaining 220 additional journals and did not examine the citations by document type on an overall basis. However, of the 781 total citations identified, the authors reported 348 (44.56%) from books and 295 (37.77%) from journal articles.

In their 2010 study, Tseng et al. explored and mapped the intellectual structure of leadership studies published in *Leadership Quarterly (LQ)* and *Educational Leadership (EL)* from 1997-2006. A total of 2,322 articles were published in the two journals during the review period which resulted in a total of 31,232 cited references. Based on their analysis, the authors identified the most cited leadership articles, the most cited scholars, and correlations among the publications.

Little research could be found that identified types of reference materials and core journals leadership educators' use for their research and scholarship. The *JOLE* was founded to move the field of leadership education forward through conversation with others and by identifying problems and developing solutions. Since its inception, 13 volumes of the *JOLE* have been published by four different editors, not including interim or guest editors. The *JOLE* has seen a number of changes over the years, most notable since the fourth editor began publishing the *JOLE* and the peer review documents were revised and the *Journal of Leadership Education Policy Manual* was developed. Edgar, Boyd, Rutherford, and Briers (2009) concluded that, "research in *JOLE* is adding to the scope and topography of discovery occurring in the field" (p. 158). However, an analysis of the research features published in the *JOLE* has only been conducted for the first five years the journal was published. Classifying the types of reference materials used by leadership educators and identifying core journals cited by leadership educators in the dissemination of their scholarly work could help determine if, and how, the *JOLE* has continued to, and is serving the field of leadership education. Edgar and Cox (2010) recommended additional research to assess the *JOLE*'s progress.

### **Purpose and Objectives**

The primary purpose of this study was to examine the nature of sources cited by the authors of research features published in the *JOLE* from Volume 1, Issue 1 through Volume 12, Issue 1. Specific objectives of the study were to:

1. Determine the citation structure of research features published in the *JOLE*.
2. Determine the relative importance of types of citations referenced by authors publishing research features in the *JOLE*.
3. Identify core journals cited by authors publishing research features in the *JOLE*.
4. Identify the most commonly cited books and articles published in research features in the *JOLE*.

### **Methods and Procedures**

A census of research features published in the *Journal of Leadership Education* from Volume 1, Issue 1 through Volume 12, Issue 1 was considered for this study. This included all issues published between Summer 2002 and Winter 2013 by the first three editors of the *JOLE*.

To summarize the scope of this research, a total of 12 volumes, 25 issues, and 125 research features were reviewed to fulfill the objectives of this analysis. All citations listed in the references of each research feature were organized based on a modification of Radhakrishna's (1995) modification of Goldsmith's (1983) classification of citations. To meet the needs of this study, Radhakrishna's (1995) model was expanded from books, journal articles, doctoral dissertations and master's theses, conference proceedings and paper presentations, magazines, and bulletins and reports to also include internet resources and unpublished sources. Frequencies and percentages were used to interpret the data. The name of each journal cited was recorded and tallied. The journals were rank ordered by frequency and percentage.

### Findings

The purpose of objective one was to determine the citation structure of research features published in the *JOLE*. The total number of research features published in the *JOLE* during the 2002-2013 review period was 125. The total number of citations within those 125 research features was 3,497 resulting in an average of 28 citations per research feature. The number of research features was greatest in 2009 when three issues of the *JOLE* were published and least in 2002 and 2003 when only two issues of the *JOLE* were published (see Table 1). On average, the numbers of articles cited ranged between 20.5 per research feature in 2005 and 34.5 in 2011, both years in which two issues of the *JOLE* were published.

Table 1

*Average Number and Distribution of Articles and Citations by Year (2002-2013)*

	Year											
	02	03	04	05	06	07	08	09	10	11	12	13
# of Research Features	3	3	6	6	15	11	7	19	17	11	17	10
# of Citations	100	63	137	123	361	283	173	544	455	379	542	337
Average Citations/RF	33.3	21.0	22.8	20.5	24.1	25.7	24.7	28.6	26.8	34.5	31.2	33.7

*Note.* Three issues of the *JOLE* were published in 2004, 2006, and 2009; two issues were published in 2002, 2003, 2005, 2008, 2010, 2011, and 2012; one issue was published in 2007; only one issue published in 2013 was included in this study.

Due to differences in publication schedules and submission dates and deadlines, some volumes of the *JOLE* consisted of two issues; whereas, others consisted of three issues. Furthermore, Volume 7 spanned two calendar years, resulting in two issues in 2008 and one issue in 2009. To more accurately illustrate trends in research features published and mean numbers of citations per research feature, data were presented by volume and issue (see Figures 1 and 2). The 125 research features were published over 25 issues resulting in an average of five research features per issue (see Table 1). The highest number of research features, 11, was published in Volume 6, Issue 1 while the least number of research features published in an issue was one and occurred in Volume 1, Issue 1, Volume 2, Issue 2, Volume 3, Issue 3, and Volume 8, Issue 1.

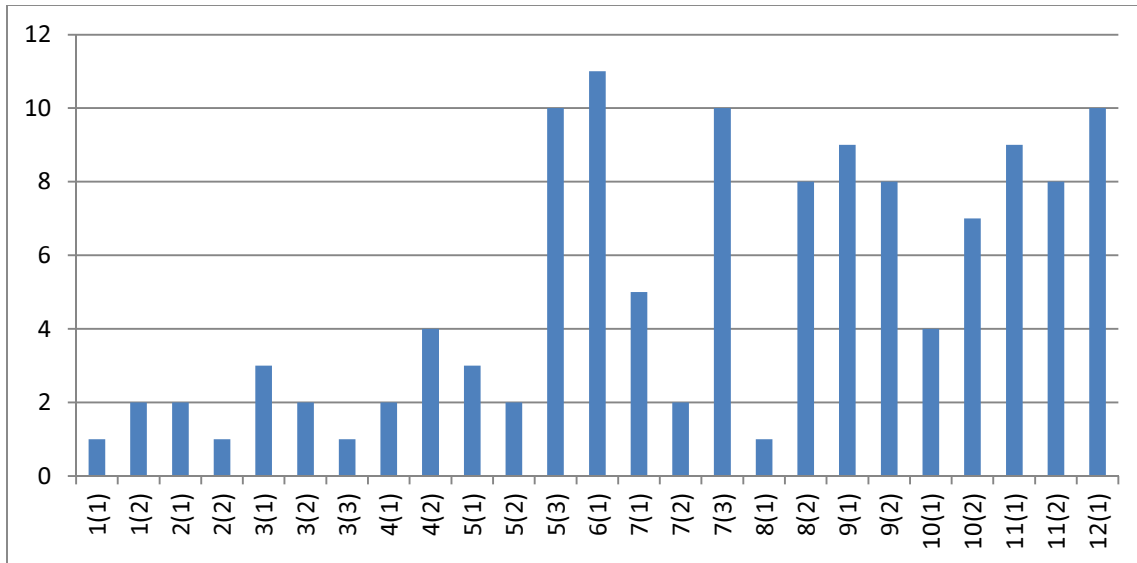


Figure 1. Number of research features per issue.

Figure 2 shows the mean number of citations per research feature by issue. The highest mean number of citations per research feature occurred in Volume 1, Issue 1 with a mean of 39 citations. The lowest mean number of citations per research feature occurred in Volume 2, Issue 2 with a mean of nine citations. It should be noted that there was only one research feature published in each of these issues.

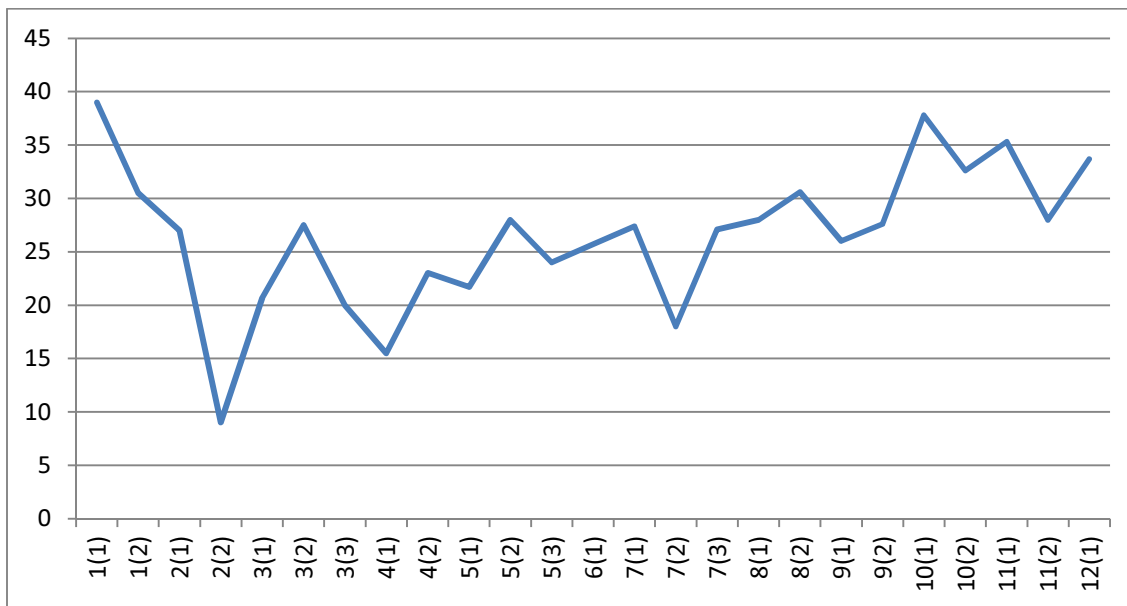


Figure 2. Trends in mean numbers of citations per research feature by issue (2002-2013).

The purpose of objective two was to determine the relative importance of types of citations referenced by authors publishing research features in the *JOLE*. According to the analysis of citations, journal articles were the most commonly referenced in the *JOLE* (see Tables 2 and 3). Journal articles accounted for 1,723 or 49.27% of citations followed by books ( $n = 1,309$ , 37.43%), bulletins/reports ( $n = 112$ , 3.20%), Internet resources ( $n = 146$ , 4.18%), dissertations/theses ( $n = 83$ , 2.37%), conference papers and proceedings ( $n = 82$ , 2.35%), magazines ( $n = 28$ , 0.80%), and unpublished manuscripts ( $n = 14$ , 0.40%).

Table 2

*Distribution of Citations in Research Features in the JOLE by Type and Year (2002-2013)*

Document Type	Year											
	02	03	04	05	06	07	08	09	10	11	12	13
Journals	44	34	76	55	145	116	84	286	253	194	256	180
Books	31	29	41	36	153	122	68	188	149	141	226	125
Internet Resources	4	0	5	2	21	17	16	33	13	9	15	11
Bulletins/Reports	4	0	10	17	6	3	1	8	8	20	26	9
Dissertation/Theses	0	0	1	9	24	12	1	8	7	8	10	3
Papers/Proceedings	2	0	0	4	7	8	3	16	23	6	7	6
Magazines	15	0	1	0	1	3	0	4	1	0	1	2
Unpublished Sources	0	0	3	0	4	2	0	1	1	1	1	1
Total	100	63	137	123	361	283	173	544	455	379	542	337

*Note.* Three issues of the *JOLE* were published in 2004, 2006, and 2009; two issues were published in 2002, 2003, 2005, 2008, 2010, 2011, and 2012; one issue was published in 2007; only one issue published in 2013 was included in this study.

Table 3

*Number and Percentage of Documents Cited in Research Features in the JOLE between 2002 and 2013*

Document Type	Number	Percent
Journals	1723	49.27
Books	1309	37.43
Internet Resources	146	4.18
Bulletins/Reports	112	3.20
Dissertations/Theses	83	2.37
Papers/Proceedings	82	2.35
Magazines	28	0.80
Unpublished Sources	14	0.40
Total	3,497	100.00

The purpose of objective three was to identify core journals cited by authors publishing research features in the *JOLE*. A total of 1,723 journal articles from 445 unique journals were cited in the research features of the *JOLE* during the time of review. From the total 1,723 journal articles, 745 (43.24%) were attributed to 13 core journals. Each of the 13 journals was cited at least 22 times and account for 1% or more of the total journal citations (see Table 4). The remaining 432 journals were cited 978 times (56.76%), each accounting for less than 1% of total journal citations.

Table 4  
*Core Journals Cited in Research Features in the Journal of Leadership Education between 2002 and 2013*

Rank	Journal Cited	Total Citations	Percent
1	<i>Journal of Leadership Education</i>	164	9.52
2	<i>Journal of Agricultural Education</i>	105	6.10
3	<i>Journal of Extension</i>	85	4.90
4	<i>Journal of College Student Development</i>	74	4.30
5	<i>Leadership Quarterly</i>	66	3.80
6	<i>Journal of Leadership Studies</i>	65	3.77
7	<i>Journal of Applied Psychology</i>	42	2.43
8	<i>National Association of Student Personnel Administrators Journal</i>	26	1.50
9	<i>Academy of Management Review</i>	25	1.45
10	<i>Harvard Business Review</i>	24	1.40
11	<i>Journal of Leadership &amp; Organizational Studies</i>	24	1.40
12	<i>Leadership &amp; Organizational Development Journal</i>	23	1.33
13	<i>Psychological Bulletin</i>	22	1.30

The purpose of objective four was to identify the most commonly referenced books and journal articles found in research features in the *JOLE*. Of the 3,497 total citations identified in this study, 3,032 were either from books or journals. Of the 3,302 books and journal citations, 2,189 unique books or journal articles were identified. Table 5 displays 14 books and journal articles that were located a total of 141 times, accounting for 5.55% of total citations. The 14 core citations included nine books and five articles.



Table 5  
 Most Cited Books and Journal Articles in Research Features in the Journal of Leadership Education between 2002 and 2013

Rank	Author	Citation	Total Citations	Percent
1	Astin, A. W., & Astin, H. S.	<i>Leadership reconsidered: Engaging higher education in social change.</i> Battle Creek, MI: W. K. Kellogg Foundation.	16	0.53
2	Lincoln, Y. S., & Guba, E. G.	<i>Naturalistic inquiry.</i> Newbury Park, CA: Sage Publications.	16	0.53
3	Bass, B. M.	<i>Bass &amp; Stogdill's handbook of leadership: Theory, research, and managerial applications (3rd ed.).</i> New York, NY: The Free Press.	14	0.46
4	Kolb, D. A.	<i>Experiential learning: Experience as the source of learning and development.</i> Englewood Cliffs, NJ: Prentice-Hall.	13	0.42
5	Glaser, B. G., & Strauss, A. L.	<i>The discovery of grounded theory.</i> Hawthorne, NY: Aldine.	13	0.42
6	Komives, S. R., Owen, J. E., Longerbeam, S. D., Mainella, F. C., & Osteen, L.	<i>Developing a leadership identity: A grounded theory.</i> <i>Journal of College Student Development</i> , 46(6), 593-611.	12	0.39
7	Erlandson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D.	<i>Doing naturalistic inquiry.</i> Newbury Park, CA: Sage Publications.	11	0.36

(continued)

Rank	Author	Citation	Total Citations	Percent
8	Brungardt, C.	<i>The making of leaders: A review of the research in leadership development and education. The Journal of Leadership Studies, 3(3), 81-95.</i>	10	0.33
9	Day, V. D.	<i>Leadership development: A review in context. Leadership Quarterly, 11(4), 581-613.</i>	9	0.30
10	Cress, C. M., Astin, H. S., Zimmerman-Oster, K., & Burkhardt, J. C.	<i>Developmental outcomes of college students' involvement in leadership activities. Journal of College Student Development, 42 (1), 15-27.</i>	8	0.26
11	Lindner, J. R., Murphy, T. H., & Briers, G. E.	<i>Handling nonresponse in social science research. Journal of Agricultural Education, 42(4), 43-53.</i>	8	0.26
12	Zimmerman-Oster, K., & Burkhardt, J. C.	<i>Leadership in the making: Impact and insights from leadership development programs in U.S. colleges and universities. Battle Creek, MI: W. K. Kellogg</i>	8	0.26
13	Dillman, D. A.	<i>Mail and internet surveys: The tailored design method. (2nd ed). New York: John Wiley &amp; Sons.</i>	8	0.26
14	Patton, M. Q.	<i>Qualitative research and evaluation methods (3rd ed.). Thousand Oaks, CA: Sage Publications.</i>	8	0.26

### Conclusions, Implications, and Recommendations

Based on the findings presented in this study, we can conclude that Volume 1, Issue 1 through Volume 12, Issue 1 of the *JOLE* lacks consistency in terms of frequency and types of articles published per issue. Although some differences in number of research features can be explained by simple nuances of a particular issue or volume, others may simply reflect the types of articles submitted at the time. For example, all articles featured in Volume 1, Issue 1 of the *JOLE* were invited articles to commemorate the debut of the publication, which may explain the low number of research features in the issue. The most research features were published in Volume 6, Issue 1, the sole issue released in 2007. The high frequency of research features may be due to the number of submissions used in one issue that may usually span two or three. To

help avoid major differences in types of articles published, it is recommended that the *JOLE* should consider publishing a set number of issues per volume each year. Furthermore, all issues of a particular volume should be released during the same calendar year to establish continuity.

The number of citations ranged from nine to 39 with an average of 28 citations per research feature. Overall, the average number of citations per article has increased since Edgar and Cox (2010) reported an average of 17 citations per article in *JOLE* from 2002-2006.

Journal articles were the most frequently cited resource in the research features analyzed in this study accounting for almost one-half ( $n = 1,723$ , 49.27%) of the total citations. Citations from books were the second most frequently cited resource, accounting for more than one-third ( $n = 1,309$ , 37.43%) of the total citations. This trend is similar to trends reported in other disciplines, including agricultural education and home economics. When analyzing the *Journal of Agricultural Education* during the 1980's, Radhakrishna (1995) reported the most frequently cited document type as journals (26%), followed closely by books (24%). However, it is interesting to note that the total percentages for both journals and books were much lower in Radhakrishna's study than the present study. In her analysis of the *Home Economics Research Journal*, Goldsmith (1983) found books (36.1%) to be more often cited during a three year mean than journals (31.1%). Similarly, Edgar and Cox (2010) reported books accounting for 44.56% of total citations and journal articles accounting for 37.77% of citations in the *JOLE* from 2002-2006. Despite whether books or journal articles were the most frequently cited document type, books and journals, nevertheless, accounted for the majority of cited references in the previous studies, as well as the current study.

Goldsmith (1983) noted, "for the most part, books are being used much less now than in the past and journals much more" (p. 208). Findings of the present study do not entirely support or contradict this assertion. Although books were found to have been cited less frequently than journal articles in the present study, they still accounted for more than one-third of the total citations (37.42%,  $n = 1,309$ ). Although it was outside the scope of this study, it is possible that journal articles were cited more heavily in the introduction and literature review sections of the research features; whereas, books were cited in the theoretical framework and methods sections. Future research should be conducted to analyze the relative contribution of each document type to the composition of research features to better understand the relevance of each in today's knowledge base.

The *JOLE* was the most often cited journal in the research features analyzed in this study. Of the 1,723 total journal article citations, 9.52% ( $n = 164$ ) were from *JOLE* articles. Edgar and Cox (2010) reported that *JOLE* represented 21.3% of total citations in *JOLE* articles to premier agricultural education journals. Based on these findings, Edgar and Cox (2010) concluded that the "*JOLE* exhibits weak self-identity, meaning it does little to build upon previous research cited in *JOLE*" (p. 97). Findings of the present study support Edgar and Cox's (2010) findings and conclusion. Despite this finding, it must be noted that one of the reasons the *JOLE* was the most frequently cited journal might be that the review form for research features used by the first three editors included the publication factor "*The author links the manuscript to existing literature/discussion in the field including references from past JOLE issues*" which placed a greater emphasis on citations from the *JOLE* than other journals in the review process.

The 13 core journals most frequently cited in the *JOLE* may provide insight into the disciplines that most frequently contribute to the journal. Although many of the founders of the *JOLE* were from extension, they hoped to broaden the scope of discussion of leadership education to include the private sector of professional leadership development trainers, non-profit organizations, as well as the military (Gallagher, 2002). The core journals found in the first 12 volumes may suggest that these audiences have either not been reached or publish their own scholarship elsewhere. Although patterns seemed to exist among the core journals cited, additional analysis for journal contribution was outside the scope of this study. Further research should explore context and content bases of the core journals' and how they contribute to the *JOLE* to better understand the fields of study that influence leadership education. Additional research should also examine if the research features published in the *JOLE* accurately represent current members in the Association of Leadership Educators.

Although the most frequently cited document type in all of the citations within the research features analyzed was journal articles, when analyzed in terms of the most frequently cited books and journal articles, nine of the 14 most cited were books. In fact, the five most frequently cited works were books. In looking at the titles of these five, it would appear as though they were cited within the research features for theory and methods purposes. However, additional research is needed to confirm the actual contribution of these citations to the research features in which they were cited.

The five journal articles appearing in the 14 most cited books and journal articles were from four distinct journals: *Journal of College Student Development*, *Journal of Leadership Studies*, *Leadership Quarterly*, and *Journal of Agricultural Education*. These four journals are in the six highest ranked core journals cited in the present study. Additionally, the most often cited journal in the present study was not one of the journals with a most often cited article. This indicated that although authors frequently cite *JOLE* articles in their research features, they were not citing the same *JOLE* articles.

When looking at the authors of the most cited books and journal articles, twenty-seven individuals were listed as authors; three authors were listed twice: H.S. Astin, J.C. Burkhardt, and K. Zimmerman-Oster. Although not identical, this is similar to findings of Edgar et al. (2009) who concluded "relatively few researchers add consistently to the scope and topography of leadership education research as revealed by the fact that no author dominated the journal" (p. 160).

This research provides leadership educators with a holistic analysis of citations in research features in the *JOLE* published by the first three editors of the journal. While providing useful, quantifiable information related to types and quantities of citations, deeper questions surrounding the impact of those citations remain. Understanding what leadership education is, drawing from the context and content areas of business, leadership (practice), and the basic sciences (e.g. psychology), may lead to improvement and focus on the education research applicable to leadership. The convergence of the knowledge bases may be the next point of inquiry to truly assess if and how the *JOLE* is serving its readers and the field of leadership education.

## References

- Andenoro, A. C., Allen, S. J., Haber-Curran, P., Jenkins, D. M., Sowcik, M., Dugan, J. P., & Osteen, L. (2013). *National Leadership Education research agenda 2013-2018: Providing strategic direction for the field of leadership education*. Retrieved from Association of Leadership Educators website: <http://leadershipeducators.org/ResearchAgenda>
- Association of Leadership Educators. (2011). *The Journal of Leadership Education*. Retrieved from <http://www.leadershipeducators.org/JOLE>
- Carr-Chellman, A. A. (2006). Where do educational technologists really publish? An examination of successful emerging scholars' publication outlets. *British Journal of Educational Technology*, 37(1), 5-15. doi: 10.1111/j.1467-8535.2005.00522.x
- Chandy, P. R., & Williams, T. G. E. (1994). The impact of journals and authors on international business research: A citational analysis of *JIBS* articles. *Journal of International Business Studies*, 25(4), 715-728.
- Crane, D. (1972). *Invisible colleges: Diffusion of knowledge in scientific communities*. Chicago, IL: The University of Chicago Press.
- De Loë, R. (2003). Where do we publish? Journals chosen by Canadian geographers, 1999-2001. *The Canadian Geographer*, 47(3), 351-354.
- Edgar, L. D., Boyd, B., Rutherford, T., & Briers, G. E. (2009). Research themes, authors, and methodologies in the *Journal of Leadership Education: A five-year look*. *Journal of Leadership Education*, 8(2), 147-166.
- Edgar, L. D., & Cox, C. (2010). Citation structure: An analysis of the literature cited in the *Journal of Leadership Education* from 2002 to 2006. *Journal of Leadership Education*, 9(1), 87-104.
- Gallagher, T. (2002). The founding of a new conversation: The *Journal of Leadership Education*. *Journal of Leadership Education*, 1(1), 3-10.
- Goldman, A. (1979). Publishing activity in marketing as an indicator of its structure and disciplinary boundaries. *Journal of Marketing Research*, 16(4), 485-494.
- Goldsmith, E. B. (1983). An empirical analysis of the Home Economics Research Journal. *Home Economics Research Journal*, 11(3), 207-213.
- Goldsmith, E. (1984). Most prolific authors in the Home Economics Research Journal and the Journal of Home Economics: A decade review. *Home Economics Research Journal*, 13(1), 3-11.
- Gross, P. L. K., & Gross, E. M. (1927). College libraries and chemical education. *Science*, 66(1713), 385-389. doi: 10.1126/science.66.1713.385

- Hodge, D. R., Lacasse, J. R., & Benson, O. (2012). Influential publications in social work discourse: The 100 most highly cited articles in disciplinary journals: 2000-09. *British Journal of Social Work, 42*(4), 765-782. doi: 10.1093/bjsw/ber093
- Radhakrishna, R. B. (1995). Core journals used by agricultural and extension educators. *Journal of Agricultural Education, 36*(4), 48-54. doi: 10.5032/jae.1995.04048
- Richardson, J. W., & McLeod, S. (2009). Where should educational leadership authors published to get noticed by the top journals in the discipline? *Education Administration Quarterly, 45*(4), 631-639. doi: 10.1177/0013161X09331770
- Schloman, B. F. (1997). Mapping the literature of allied health: Project overview. *Bulletin of the Medical Library Association, 85*(3), 271-277.
- Tseng, H. C., Tung, H. L., & Duan, C. H. (2010). Mapping the intellectual structure of modern leadership studies. *Leadership & Organizational Development Journal, 31*(1), 57-70.

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Ashley Stewart is a Ph.D. student in the Department of Agricultural Leadership, Education, and Communications at Texas A&M University. She assists in the instruction of courses related to teacher education, including clinical professional experience in agricultural science and designing instruction for secondary agricultural education programs. Ashley spent four years as an agriculture education teacher in North Carolina before beginning her doctoral program. Her primary research interest is in the preparation of teachers for school-based agriculture education programs.