Editorial: Evidence-based Guidelines Regarding the Number of Citations Used in Manuscripts Submitted to Journals for Review for Publication and Articles Published in Journals

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The purpose of our editorial was to examine factors related to the number of citations, as measured by the number of references used and the number of references per manuscript/article page, used in manuscripts submitted to select journals for review for publication. To analyze the distribution and predictability of the number of references, we utilized four data sets that represented three journals, namely, Research in the Schools (RITS), Educational Researcher (ER), and Journal of Mixed Methods Research (JMMR). Among the numerous findings was that manuscripts submitted to RITS that received an editor decision of accept or revise and resubmit ($M = 40.94, SD = 19.46$) contained statistically significantly more references than did RITS manuscripts that received an editor decision of reject ($M = 31.84, SD = 14.30$), with a Cohen’s $d$ effect size of 0.53. Similarly, manuscripts submitted to ER that received an editor decision of accept or revise and resubmit ($M = 52.55, SD = 41.03$) contained statistically significantly more references than did ER manuscripts that received an editor decision of reject ($M = 32.37, SD = 25.84$), with a Cohen’s $d$ effect size of 0.67. More specifically, RITS manuscripts with less than 45 references were 2.52 (95% CI = 1.03, 6.19) times more likely to be rejected than were manuscripts with 45 references or more. Further, ER manuscripts with less than 61 references were 1.73 (95% CI = 1.03, 3.00) times more likely to be rejected than were manuscripts with 61 or more references. Implications are discussed.
In addition, Petty, Fleming, and Fabrigar (1999) examined the reviewer comments (n = 1,636) pertaining to 749 manuscripts submitted to the Personality and Social Psychology Bulletin over a 3.5-year period (i.e., July 1987 to December 1990). Using a series of multiple regression analyses, these researchers documented that the quality of the literature review—as measured via a 3-point rating scale (i.e., 1 = inadequate; 2 = marginal; 3 = good)—statistically significantly predicted the reviewers’ publication recommendation, even when controlling for the effects of each rater and for the effects of manuscript, author, and reviewer characteristics. Similarly, Eisenberg, Thompson, Augir, and Stanley (2002), who examined the initial version of 706 manuscripts submitted for review to Psychological Bulletin from 1996 to 2001, observed a very large and statistically significant relationship (i.e., r = .59, p < .001) between adequacy of literature review (as measured by the average reviewer rating) and reviewer recommendation (i.e., 1 = reject; 2 = doubtful [probably should be rejected]; 3 = reject/revise; 4 = recommend acceptance [with some reservation]; 5 = strongly recommend acceptance [as is or with minor revisions])). Also, these researchers noted a moderate-to-large and statistically significant point-biserial correlation (i.e., r = .40, p < .001) between adequacy of literature review (i.e., 5-point scale ranging from 1 [low] to 5 [high]) and final editor decision (i.e., 0 = reject; 1 = accept). When they examined the final (i.e., last reviewed) versions of 147 of these manuscripts that were sent out for external review for at least a second time (i.e., 120 manuscripts representing second revisions, 26 manuscripts representing third revisions, and 1 manuscript representing a fourth revision), Eisenberg et al. (2002) documented a very large and statistically significant relationship (i.e., r = .59, p < .001) between adequacy of literature review and reviewer recommendation and a moderate-to-large and statistically significant point-biserial correlation (i.e., r = .37, p < .001) between adequacy of literature review and final editor decision.

Eisenberg et al. (2002) also recognized the predictability of another index of the quality of the literature review, namely, what they called “balance and fairness in coverage of alternative views” (p. 999). Specifically, they documented, among initial submissions, a very large and statistically significant relationship (i.e., r = .63, p < .001) between balance and fairness in coverage of alternative views (as measured by the average reviewer rating) and reviewer recommendation, as well as a moderate-to-large and statistically significant point-biserial correlation (i.e., r = .37, p < .001) between balance and fairness in coverage of alternative views and final editor decision. Among final submissions, these researchers reported a very large and statistically significant relationship (i.e., r = .62, p < .001) between balance and fairness in coverage of alternative views (as measured by the average reviewer rating) and reviewer recommendation, as well as a moderate-to-large and statistically significant point-biserial correlation (i.e., r = .34, p < .001) between balance and fairness in coverage of alternative views and final editor decision. In summary, then, in Eisenberg et al.’s (2002) investigation, both the adequacy of literature review and balance and fairness in coverage of alternative views were statistically significant and practically significant predictors of both reviewer recommendations and final editor decision. Similarly, in a previous Research in the Schools editorial, Onwuegbuzie and Daniel (2005), who examined 52 manuscripts submitted to Research in the Schools over a 2-year period, reported that 40% of the these manuscripts contained inadequate literature reviews. These co-editors also documented that these inadequately written manuscripts were more than six times more likely than were their counterparts to have their manuscripts rejected for publication.

Thus, the findings of Petty et al. (1999), Eisenberg et al. (2002), and Onwuegbuzie and Daniel (2005) indicate the importance of the literature review in the manuscript evaluation process of both reviewers and editors. And Onwuegbuzie’s (2014a) preliminary qualitative findings obtained via interviews of award-winning reviewers indicates that these aforementioned relationships between the quality of the literature review and reviewer recommendation and editor decision are causal in nature. This causal link, in turn, suggests that determining quality indicators of literature reviews represents a fruitful avenue for research.

As surmised by Onwuegbuzie and Frels (2015), the review of the literature should inform not only the literature review section of an empirical study but also any or all of the 12 components of a primary research report: problem statement, literature review, theoretical/conceptual framework, research question(s), hypotheses, participants, instruments, procedures, analyses, interpretation of the findings, directions for future research, and implications for the field. In other words, with very few exceptions (e.g., grounded theory research [Glaser & Strauss, 1967], wherein some proponents argue against an initial literature review before data collection; for an excellent discussion, see McGhee, Marland, & Atkinson, 2007), the literature review should take place throughout the empirical research process—that is, before, during, and after the primary research study—whether the study represents a quantitative research study, a qualitative research study, or a mixed research study. And because it is likely to expect that literature reviews that inform multiple components of an empirical study would contain more citations than do literature
reviews that only inform the literature review section of an empirical report, it is reasonable to expect that the number of citations would be a predictor of the quality of a manuscript. And consistent with our assertion here, with regard to unpublished manuscripts, Petty et al. (1999) reported a moderate-to-large and statistically significant relationship (i.e., $r = .43$, $p < .001$) between the reviewers’ ratings of the literature review and the number of references among the 749 manuscripts submitted to the Personality and Social Psychology Bulletin. Also, the number of references was statistically significantly related to the reviewers’ rating of the conceptualization/theory/hypothesis component of the manuscript. In contrast, however, the number of references was not statistically significantly related to either the reviewers’ recommendation or the editors’ decision. Further, with respect to published articles, using a multiple regression analysis, Lovaglia (1991) observed that the number of references presented in articles representing the field of sociology predicted the number of citations that they subsequently received over a 9-year period.

However, although representing excellent works, the studies of Petty et al. (1999) and Lovaglia (1991) are somewhat dated, being conducted 15 years ago and 23 years ago, respectively. Moreover, these studies took place well before the introduction of freely accessible web search engines that index the full text of scholarly works across multiple disciplines and fields such as Google Scholar (circa 2004), which have greatly made it easier for researchers to conduct literature reviews. Further, the last several years also have seen the birth of at least eight commercial (e.g., RefWorks; circa 2001) and 18 freeware/open source (e.g., Mendeley; circa 2008) reference management software programs—as documented by Onwuegbuzie and Frels (2015). And these reference management software programs make it easier for researchers to store and to organize scholarly works, and can be integrated with word processors such that reference lists can be generated automatically by the reference management software program in a manner that complies with many of the most common reference formats (e.g., American Psychological Association’s APA Style, The Chicago Manual of Style, Modern Language Association’s MLA Style Manual). Also, with the number of articles published each year, the number of new journals being launched, and the number of researchers growing each year by approximately 3%, 3.5%, and 3% respectively (Ware, 2006), and with more than 1.4 million articles being published worldwide each year (Ware, 2006), researchers currently have exponentially more works that they can cite than they did during the 1990s when the aforementioned studies of the number of references used in articles took place (i.e., Lovaglia, 1991; Petty et al., 1999).

Thus, the time is ripe to revisit examination of the predictability of number of references.

**Purpose of Study**

With the aforementioned discussion in mind, the purpose of our study was to examine factors related to the number of citations, as measured by the number of references used and the number of references per manuscript/article page, used in manuscripts submitted to select journals for review for publication. The number of references per manuscript/article page also was included because of the strict page/word count maintained by many journal editors/publishers. Specifically, the following five research questions were addressed:

1. What is the distribution of the number of citations (i.e., the number of references used, the number of references per manuscript/article page) used in manuscripts submitted to select journals?
2. What is the distribution of the number of citations (i.e., the number of references used, the number of references per manuscript/article page) used in articles published in select journals?
3. What is the relationship between the number of citations (i.e., the number of references used, the number of references per manuscript/article page) used in manuscripts submitted to select journals?
4. What is the relationship between the number of citations (i.e., the number of references used, the number of references per manuscript/article page) used and style guide errors (i.e., citation errors) among manuscripts submitted to select journals?
5. What is the relationship between the number of citations (i.e., the number of references used, the number of references per manuscript/article page) and specific demographic characteristics (i.e., number of authors, number of manuscript pages, number of words, gender of lead author, genre of manuscript) among manuscripts submitted to select journal journals?
6. What is the relationship between the number of citations (i.e., the number of references used, the number of references per manuscript/article page) used and manuscript disposition (i.e., accept/revise and resubmit vs. reject) among manuscripts submitted to select journals?

**Method**

**Sample Size and Procedures**

To analyze the distribution and predictability of the number of references, we utilized four data sets. These four data sets provided data that represented three journals, namely, Research in the Schools, Educational Researcher, and Journal of Mixed Methods Research.
Research in the Schools. Research in the Schools (RITS) provided two data sets: one data set containing manuscripts submitted for review for possible publication in RITS (i.e., unpublished RITS manuscripts) and one data set containing articles that were published in Research in the Schools (i.e., published RITS articles).

Unpublished Manuscripts. With respect to the unpublished RITS manuscripts, we examined 68 manuscripts submitted to RITS over a 3-year period (i.e., 2011-2014). These manuscripts represented approximately 40% of all manuscripts submitted to this journal over this time frame, which made their findings generalizable at the very least to the population of manuscripts submitted to RITS.

One of the editors of the RITS (i.e., lead author of this editorial) meticulously counted the number of references contained in each of these 68 manuscripts, as well as determined the number of references per manuscript page by dividing the number of references by the number of manuscript pages. Also, the editor documented every citation error committed by these 68 sets of authors. Each manuscript required more than 3 hours to count the number of references and to identify all the citation errors—representing more than 213 hours of coding. In addition, the editor noted several demographic features of the manuscript (e.g., number of authors, number of manuscript pages, gender of first author, genre of manuscript), as well as the disposition of the manuscript. Therefore, this data set was extremely rich, representing a data set that only journal editors have the opportunity to develop.

Published articles. With regard to published RITS articles, we examined 66 published RITS articles. These articles represented all articles published in RITS over a 6-year period (i.e., 2008-2013). One of the RITS editors (i.e., lead author of this editorial) meticulously counted the number of references contained in each of these 66 articles, as well as determined the number of references per article page by dividing the number of references by the number of article pages. Also, the editor noted several demographic characteristics of the article (i.e., number of authors, number of article pages, gender of first author, genre of manuscript).

Educational Researcher. Unpublished manuscripts. Educational Researcher (ER) provided one data set that was compiled by Onwuegbuzie (2014d), which consisted of 87 manuscripts submitted to ER for review for publication over a period of 3.5 years. The journal ER was selected because not only is it the premier flagship journal of the American Educational Research Association but also it represents the educational journal that, at the time that these articles were published, had the highest impact factor (i.e., 3.774) among 177 journals representing education and education research. The lead author of this editorial was part of the editorial team (i.e., editor) that secured this extremely high impact factor. As such, he had complete access to every manuscript submitted to ER during this time period. The 87 manuscripts selected by Onwuegbuzie (2014d) represented those manuscripts that were submitted for the first time to the Research News and Comment section of ER—one of two ER sections at that time. Further, these 87 manuscripts represented those manuscripts that had been sent out for external review. These 87 manuscripts represented 51.48% of all manuscripts submitted to the Research News and Comment section of ER over this period, which rendered our findings generalizable to the population of manuscripts submitted to Educational Researcher—at least over this period of time.

Onwuegbuzie (2014d) meticulously counted the number of references contained in each of these 87 manuscripts, as well as determined the number of references per manuscript page. Also, he documented every citation error committed by these 87 sets of authors. In addition, Onwuegbuzie (2014d) documented several demographic features of the manuscript (e.g., number of authors, number of manuscript pages, gender of first author, genre of manuscript), as well as the disposition of the manuscript. Therefore, this data set, like the RITS data set, was extremely rich, again representing a data set that only journal editors have the opportunity to develop.

Journal of Mixed Methods Research. Published articles. Journal of Mixed Methods Research (JMMR) provided one data set that was compiled by Onwuegbuzie (2014e), which consisted of all 146 articles that have been published from its inception in 2007 through 2014. This journal was selected because, as noted in its website, it represents “a premiere outlet for ground-breaking and seminal work in the field of mixed methods research, as well as a primary forum for the growing community of international and multidisciplinary scholars of mixed methods research” (Journal of Mixed Methods Research, 2014, ¶ 6) and had a 2013 impact factor of 1.675, which yielded a ranking of 9 out of 92 among journals representing the Social Sciences, Interdisciplinary. Onwuegbuzie (2014e) meticulously counted the number of references contained in each of these 146 articles, as well as determined the number of references per article page. Also, he noted several demographic features of the manuscript (i.e., number of authors, number of article pages, gender of first author, genre of manuscript).

Analysis Research Question 1. What is the distribution of the number of citations (i.e., the number of references used, the number of references per manuscript page) used in manuscripts submitted to select journals? Descriptive statistics (i.e., measures of central tendency, measures of dispersion,
results of this study, which focused on the number of citations used in manuscripts submitted to select journals. The results showed a positive relationship between the number of citations and the number of references used in the manuscripts. Specifically, the results indicated that manuscripts with a higher number of references tended to have a higher number of citations. This finding is consistent with previous research in this area, which has also found a positive relationship between the number of references and the number of citations.

In terms of the demographic characteristics of the authors, the results showed that manuscripts submitted by authors with a higher number of publications tended to have a higher number of citations. This finding is consistent with previous research in this area, which has also found a positive relationship between the number of publications and the number of citations.

In conclusion, the results of this study suggest that the number of references used in manuscripts submitted to select journals is positively related to the number of citations. This finding has important implications for journal editors and manuscript reviewers, as it suggests that manuscripts with a higher number of references are more likely to be cited. This finding also suggests that researchers should strive to include a larger number of references in their manuscripts in order to increase the likelihood of their work being cited.
67% of the manuscripts contained 28 references or more
50% of the manuscripts contained 35 references or more
33% of the manuscripts contained 41 references or more

25% of the manuscripts contained 45 references or more
10% of the manuscripts contained 62 references or more

Table 1

Descriptive Statistics for the Number of References and Number of References Per Manuscript Among Unpublished Manuscripts Submitted to Research in the Schools by Manuscript Disposition

<table>
<thead>
<tr>
<th>Journal</th>
<th>Status</th>
<th>Citation Index</th>
<th>Disposition of Unpublished Manuscript</th>
<th>M</th>
<th>SD</th>
<th>95% CI LL</th>
<th>95% CI UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>RITS</td>
<td>Unpublished</td>
<td>No. of references</td>
<td>All (n = 68)</td>
<td>36.26</td>
<td>17.61</td>
<td>32.06</td>
<td>40.46</td>
</tr>
<tr>
<td>RITS</td>
<td>Unpublished</td>
<td>No. of references</td>
<td>Accept/Revise and resubmit (n = 36)</td>
<td>40.94</td>
<td>19.46</td>
<td>34.36</td>
<td>47.53</td>
</tr>
<tr>
<td>RITS</td>
<td>Unpublished</td>
<td>No. of references</td>
<td>Reject (n = 32)</td>
<td>31.84</td>
<td>14.30</td>
<td>26.69</td>
<td>37.00</td>
</tr>
<tr>
<td>RITS</td>
<td>Unpublished</td>
<td>No. of references per page</td>
<td>All (n = 68)</td>
<td>1.19</td>
<td>0.52</td>
<td>1.06</td>
<td>1.31</td>
</tr>
<tr>
<td>RITS</td>
<td>Unpublished</td>
<td>No. of references per page</td>
<td>Accept/Revise and resubmit (n = 36)</td>
<td>1.28</td>
<td>0.60</td>
<td>1.07</td>
<td>1.48</td>
</tr>
<tr>
<td>RITS</td>
<td>Unpublished</td>
<td>No. of references per page</td>
<td>Reject (n = 32)</td>
<td>1.10</td>
<td>0.42</td>
<td>0.95</td>
<td>1.25</td>
</tr>
</tbody>
</table>

Note: CI = Confidence Interval; RITS = Research in the Schools

Using Onwuegbuzie and Daniel’s (2002) criteria for a standardized skewness coefficient (i.e., skewness coefficient divided by its standard error) and a standardized kurtosis coefficient (i.e., kurtosis coefficient divided by its standard error), wherein standardized skewness coefficients and standardized kurtosis coefficients that lie outside the ±3 range indicate serious departures from normality, the number of references for RITS manuscripts (standardized skewness coefficient = 2.05; standardized kurtosis coefficient = -0.25) suggested normality.

From Table 1, it can also be seen that the mean number of references per page for the 68 manuscripts was 1.19 (SD = 0.52), with the number of references ranging from 0.43 to 3.41. Interestingly, the following list presents the approximate percentages of manuscripts that contain the least number of references per page:

- 90% of the manuscripts contained 0.59 references per page or more
- 75% of the manuscripts contained 0.79 references per page or more
- 67% of the manuscripts contained 0.93 references per page or more
- 50% of the manuscripts contained 1.21 references or more
- 33% of the manuscripts contained 1.33 references per page or more
- 25% of the manuscripts contained 1.50 references or more
- 10% of the manuscripts contained 1.75 references per page or more
Using Onwuegbuzie and Daniel’s (2002) criteria for a standardized skewness coefficient and a standardized kurtosis coefficient, the number of references per page for RITS manuscripts (standardized skewness coefficient = 4.37; standardized kurtosis coefficient = 6.26) suggested a serious departure from non-normality. Specifically, this non-normality was characterized by positive skew and a leptokurtic distribution.

**ER unpublished manuscripts.** Table 2 presents the means, standard deviations, and 95% confidence interval pertaining to the number of references among unpublished manuscripts submitted to ER, across all manuscripts and as a function of manuscript disposition (i.e., editor decision). It can be seen from this table that the mean number of references for these 87 manuscripts was 37.47 ($SD = 31.40$), with the number of references ranging from 0 to 166. Interestingly, the following list presents the approximate percentages of manuscripts that contain the least number of references:

- 90% of the manuscripts contained 10 references or more
- 75% of the manuscripts contained 17 references or more
- 67% of the manuscripts contained 21 references or more
- 50% of the manuscripts contained 27 references or more
- 33% of the manuscripts contained 38 references or more
- 25% of the manuscripts contained 51 references or more
- 10% of the manuscripts contained 84 references or more.

Table 2

<table>
<thead>
<tr>
<th>Journal</th>
<th>Status</th>
<th>Citation Index</th>
<th>Disposition of Unpublished Manuscript</th>
<th>$M$</th>
<th>$SD$</th>
<th>95% CI LL</th>
<th>95% CI UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER</td>
<td>Unpublished</td>
<td>No. of references</td>
<td>All ($n = 87$)</td>
<td>37.47</td>
<td>31.40</td>
<td>30.78</td>
<td>44.16</td>
</tr>
<tr>
<td>ER</td>
<td>Unpublished</td>
<td>No. of references</td>
<td>Accept/Revise and resubmit ($n = 22$)</td>
<td>52.55</td>
<td>41.03</td>
<td>34.35</td>
<td>70.74</td>
</tr>
<tr>
<td>ER</td>
<td>Unpublished</td>
<td>No. of references</td>
<td>Reject ($n = 65$)</td>
<td>32.37</td>
<td>25.84</td>
<td>25.97</td>
<td>38.77</td>
</tr>
<tr>
<td>ER</td>
<td>Unpublished</td>
<td>No. of references per page</td>
<td>All ($n = 87$)</td>
<td>1.39</td>
<td>0.77</td>
<td>1.23</td>
<td>1.56</td>
</tr>
<tr>
<td>ER</td>
<td>Unpublished</td>
<td>No. of references per page</td>
<td>Accept/Revise and resubmit ($n = 22$)</td>
<td>1.54</td>
<td>0.85</td>
<td>1.16</td>
<td>1.91</td>
</tr>
<tr>
<td>ER</td>
<td>Unpublished</td>
<td>No. of references per page</td>
<td>Reject ($n = 65$)</td>
<td>1.34</td>
<td>0.74</td>
<td>1.16</td>
<td>1.53</td>
</tr>
</tbody>
</table>

Note: CI = Confidence Interval; ER = Educational Researcher

Using Onwuegbuzie and Daniel’s (2002) criteria, the number of references for ER manuscripts (standardized skewness coefficient = 6.59; standardized kurtosis coefficient = 6.32) suggested a serious departure from normality. Specifically, this non-normality was characterized by positive skew and a leptokurtic distribution. This non-normality was in contrast to the number of references for RITS manuscripts, which, as presented earlier, yielded normality.

Table 2 also presents the means, standard deviations, and 95% confidence interval pertaining to the number of references per manuscript page among unpublished manuscripts for ER, across all
manuscripts and as a function of manuscript disposition (i.e., editor decision). This table indicates that the mean number of references per manuscript page for the 87 manuscripts was 1.39 ($SD = 0.77$), with the number of references per manuscript page ranging from 0 to 3.25. Interestingly, the following list presents the approximate percentages of manuscripts that contain the least number of references per page:

- 90% of the manuscripts contained 0.50 references per manuscript page or more
- 75% of the manuscripts contained 0.83 references per manuscript page or more
- 67% of the manuscripts contained 0.94 references per manuscript page or more
- 50% of the manuscripts contained 1.27 references per manuscript page or more
- 33% of the manuscripts contained 1.63 references per manuscript page or more
- 25% of the manuscripts contained 1.93 references per manuscript page or more
- 10% of the manuscripts contained 2.53 references per manuscript page or more

Using Onwuegbuzie and Daniel’s (2002) criteria for a standardized skewness coefficient and a standardized kurtosis coefficient, the number of references per page for ER manuscripts (standardized skewness coefficient = 1.95; standardized kurtosis coefficient = -0.82) suggested normality.

Research Question 2. What is the distribution of the number of citations (i.e., the number of references used, the number of references per article page) used in articles published in select journals?

RITS published articles. Table 3 presents the means, standard deviations, and 95% confidence interval pertaining to the number of references among published RITS articles. It can be seen from this table that the mean number of references for the 66 articles was 48.39 ($SD = 21.83$), with the number of references ranging from 11 to 108. Interestingly, the following list presents the approximate percentages of manuscripts that contain the least number of references:

- 90% of the articles contained 21 references or more
- 75% of the articles contained 34 references or more
- 67% of the articles contained 37 references or more
- 50% of the articles contained 46 references or more
- 33% of the articles contained 55 references or more
- 25% of the articles contained 62 references or more
- 10% of the articles contained 79 references or more

Using Onwuegbuzie and Daniel’s (2002) criteria, the number of references for the RITS published articles manuscripts (standardized skewness coefficient = 2.06; standardized kurtosis coefficient = 0.12) suggested normality. Table 3 also presents the means, standard deviations, and 95% confidence interval pertaining to the number of references per page among published RITS articles. It can be seen from this table that the mean number of references for the 66 articles was 3.68 ($SD = 1.53$), with the number of references ranging from 0.69 to 7.71. Interestingly, the following list presents the approximate percentages of manuscripts that contain the least number of references per page:

- 90% of the articles contained 2.00 references per page or more
- 75% of the articles contained 2.64 references per page or more
- 67% of the articles contained 2.87 references or more
- 50% of the articles contained 3.26 references per page or more
- 33% of the articles contained 4.25 references per page or more
- 25% of the articles contained 4.50 references per page or more
- 10% of the articles contained 5.85 references per page or more

Using Onwuegbuzie and Daniel’s (2002) criteria, the number of references for the RITS published articles manuscripts (standardized skewness coefficient = -0.13; standardized kurtosis coefficient = 0.12) suggested normality.

JMMR published articles. Table 3 also presents the means, standard deviations, and 95% confidence interval pertaining to the number of references among published JMMR articles. This table indicates that the mean number of references for the 146 articles was 50.88 ($SD = 21.50$), with the number of references ranging from 9 to 139. Interestingly, the following list presents the approximate percentages of manuscripts that contain the least number of references:

- 90% of the articles contained 25 references or more
- 75% of the articles contained 36 references or more
- 67% of the articles contained 40 references or more
- 50% of the articles contained 48 references or more
- 33% of the articles contained 58 references or more
- 25% of the articles contained 63 references or more
- 10% of the articles contained 77 references or more
Table 3

Descriptive Statistics for the Number of References and Number of References per Article Page Among Published Articles (i.e., RITS, JMMR)

<table>
<thead>
<tr>
<th>Journal</th>
<th>Status</th>
<th>Citation Index</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>95% CI LL</th>
<th>95% CI UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>RITS</td>
<td>Published</td>
<td>No. of references</td>
<td>66</td>
<td>48.39</td>
<td>21.83</td>
<td>43.03</td>
<td>53.76</td>
</tr>
<tr>
<td>RITS</td>
<td>Published</td>
<td>No. of references per page</td>
<td>66</td>
<td>3.68</td>
<td>1.53</td>
<td>3.30</td>
<td>4.05</td>
</tr>
<tr>
<td>JMMR</td>
<td>Published</td>
<td>No. of references</td>
<td>146</td>
<td>50.88</td>
<td>21.50</td>
<td>47.37</td>
<td>54.40</td>
</tr>
<tr>
<td>JMMR</td>
<td>Published</td>
<td>No. of references per page</td>
<td>146</td>
<td>2.71</td>
<td>0.94</td>
<td>2.56</td>
<td>2.87</td>
</tr>
</tbody>
</table>

Note: CI = Confidence Interval; RITS = Research in the Schools; JMMR = Journal of Mixed Methods in Research

Using Onwuegbuzie and Daniel’s (2002) criteria, the number of references for ER manuscripts (standardized skewness coefficient = 4.50; standardized kurtosis coefficient = 4.91) suggested a serious departure from normality. Specifically, this non-normality was characterized by positive skew and a leptokurtic distribution.

Using Onwuegbuzie and Daniel’s (2002) criteria, the number of references for ER manuscripts (standardized skewness coefficient = 3.97; standardized kurtosis coefficient = 2.52) suggested a serious departure from normality. Specifically, this non-normality was characterized by positive skew and a leptokurtic distribution.

Research Question 3. What is the relationship between the number of citations (i.e., the number of references used, the number of references per manuscript page) used and style guide errors (i.e., citation errors) among manuscripts submitted to select journals?

RITS unpublished manuscripts. Because of the normality of the number of references variable among RITS unpublished manuscripts, a parametric analysis was used to assess its relationship with the number of citation errors. The relationship (i.e., Pearson $r$) between the number of references and the number of citation errors was statistically significant ($r = .28, p = .019$). Using Cohen’s (1988) criteria, this value represented a moderate relationship between these variables. In contrast, because of the non-normality of the number of references per page variable among RITS unpublished manuscripts, a nonparametric analysis was used to assess its relationship with the number of citation errors. The correlation (i.e., Spearman’s rho) between the number of references per page and the number of citation errors was statistically significant ($r_s = .30, p = .014$). Using Cohen’s (1988) criteria, this value represented a moderate relationship between these variables.

ER unpublished manuscripts. Contrastingly, because of the non-normality of the
number of references variable among ER unpublished manuscripts, a nonparametric analysis was used to assess its relationship with the number of citation errors. The correlation (i.e., Spearman’s ρ) between the number of references and the number of citation errors was statistically significant (ρ = .53, p < .0001). Using Cohen’s (1988) criteria, this value represented a large relationship between these variables. Contrasting, because of the normality of the number of references per page variable among ER unpublished manuscripts, a parametric analysis was used to assess its relationship with the number of citation errors. The correlation (i.e., Pearson r) between the number of references and the number of citation errors was statistically significant (r = .42, p < .0001). Using Cohen’s (1988) criteria, this value represented a moderate-to-large relationship between these variables.  

**Research Question 4. What is the relationship between the number of citations (i.e., the number of references used, the number of references per manuscript page) and select demographic characteristics (i.e., number of authors, number of manuscript pages, number of words, gender of lead author, genre of manuscript) among manuscripts submitted to specific journals?**

**RITS unpublished manuscripts.** After applying the Bonferroni adjustment to control for the inflation of Type I error (i.e., adjusted α = .05/3 = .0167), a series of Pearson rs revealed a statistically significant relationship between the number of references in RITS unpublished manuscripts and the number of manuscript pages (r = .46, p < .0001). However, no statistically significant relationship emerged between the number of references and the number of authors (r = .03, p = .89) and the gender of the lead author (r = .08, p = .68). Further, an analysis of variance (ANOVA) revealed that although qualitative research articles (M = 41.75, SD = 14.98), on average, had the greatest number of references, followed by mixed research articles (M = 39.59, SD = 17.17), and then quantitative research manuscripts (M = 33.25, SD = 18.29), these differences were not statistically significant, F(2, 65) = 1.47, p = .24.

With respect to the number of references per manuscript page, after applying the Bonferroni adjustment to control for the inflation of Type I error (i.e., adjusted α = .05/2 = .025), a series of Spearman rhos revealed no statistically significant relationship between the number of references per article page and the number of authors (r = -.02, p = .94) and the gender of the lead author (r = -.12, p = .51). Further, a nonparametric ANOVA, specifically, the Kruskal-Wallis test revealed that although mixed research articles (M = 1.33, SD = 0.74), on average, had the greatest number of references, followed by qualitative research articles (M = 1.17, SD = 0.35), and then quantitative research manuscripts (M = 1.13, SD = 0.47), these differences were not statistically significant, Χ²(2) = 0.45, p = .80.

**ER unpublished manuscripts.** With respect to the number of references, after applying the Bonferroni adjustment to control for the inflation of Type I error (i.e., adjusted α = .05/3 = .017), a series of Spearman rho correlation coefficients revealed a statistically significant relationship between the number of references in ER unpublished manuscripts and the number of manuscript pages (r = .65, p < .0001) and the number of words in the manuscript (r = .73, p < .0001). However, no statistically significant relationship emerged between the number of references and the number of authors (r = .20, p = .11). With regard to the number of references per manuscript page, after applying the Bonferroni adjustment to control for the inflation of Type I error, a series of Pearson rs revealed a statistically significant relationship between the number of references in ER unpublished manuscripts and the number of manuscript pages (r = .66, p < .0001) and the number of words in the manuscript (r = .71, p < .0001). However, no statistically significant relationship emerged between the number of references and the number of authors (r = .19, p = .14).

**Research Question 5. What is the relationship between the number of citations (i.e., the number of references used, the number of references per article page) and select demographic characteristics (i.e., number of authors, number of article pages gender of lead author, genre of article) among articles published in select journals?**

**RITS published articles.** After applying the Bonferroni adjustment to control for the inflation of Type I error (i.e., adjusted α = .05/3 = .0167), a series of Pearson rs revealed a statistically significant relationship between the number of references in RITS published manuscripts and the number of article pages (r = .36, p = .003). However, no statistically significant relationships emerged between the number of references and the number of authors (r = .18, p = .14) and the gender of the lead author (r = -.02, p = .89). Further, a parametric ANOVA revealed no statistically significant difference in the number of references as a function of article genre (i.e., qualitative, quantitative, or mixed research), F(3, 63) = 0.60, p = .55.

With respect to the number of references per page, after applying the Bonferroni adjustment to control for the inflation of Type I error, a series of Spearman rhos revealed no statistically significant relationship between the number of references per page in RITS published manuscripts and the number of article pages (r = -.22, p = .07), the number of authors (r = -.22, p = .07), and the gender of the lead author (r = -.22, p = .07). Further, a nonparametric ANOVA revealed no statistically significant difference in the number of references per page as a
function of article genre (i.e., quantitative, qualitative, or mixed research), $X^2(2) = 0.31, p = .86$.

**JMMR published articles.** After applying the Bonferroni adjustment to control for the inflation of Type I error (i.e., adjusted $\alpha = .05/3 = .0167$), a series of Spearman rho correlation coefficients revealed a statistically significant relationship between the number of references in JMMR published manuscripts and the number of article pages ($r_s = .54, p < .0001$) and the number of authors ($r_s = .22, p = .009$). However, no statistically significant relationship emerged between the number of references and the gender of the lead author ($r_s = .03, p = .75$). Further, a nonparametric independent samples $t$ test (i.e., Mann-Whitney’s $U$) revealed no statistically significant difference ($U = 2360.00, p = .64$) in the number of references between authors of methodological/conceptual articles ($M = 50.44, SD = 22.83$) and authors of empirical research articles ($M = 51.32, SD = 20.83$).

With respect to the number of references per page, after applying the Bonferroni adjustment to control for the inflation of Type I error (i.e., adjusted $\alpha = .05/3 = .0167$), a series of Pearson $r$s revealed no statistically significant relationship between the number of references per page in JMMR published manuscripts and the number of article pages ($r = -.12, p = .16$), the number of authors ($r = -.14, p = .09$), and the gender of the lead author ($r = -.04, p = .66$). Further, a parametric independent samples $t$ test revealed a statistically significant difference ($t(83.10) = 2.89, p = .005$) in the number of references per page between authors of methodological/conceptual articles ($M = 3.02, SD = 1.14$) and authors of empirical research articles ($M = 2.52, SD = 0.75$). The effect size associated with this difference, as measured by Cohen’s (1988) $d$, was moderate at 0.55.

**Research Question 6.** What is the relationship between the number of citations (i.e., the number of references per manuscript page) used and manuscript disposition (i.e., accept/review and resubmit vs. reject) among manuscripts submitted to select journals?

**RITS unpublished manuscripts.** A parametric independent samples $t$ test revealed that the RITS manuscripts that received an editor decision of accept or revise and resubmit ($M = 40.94, SD = 19.46$) contained statistically significantly more references ($t(63.84) = 2.21, p = .03$) than did RITS manuscripts that received an editor decision of reject ($M = 31.84, SD = 14.30$). The effect size associated with this difference was 0.53, which represents a medium effect. With respect to the number of references per page, a nonparametric independent samples $t$ test revealed no statistically significantly difference in the number of references per page ($U = 486.00, p = .27$) between RITS manuscripts that received an editor decision of accept or revise and resubmit ($M = 1.28, SD = 0.60$) and RITS manuscripts that received an editor decision of reject ($M = 1.10, SD = 0.42$).

**ER unpublished manuscripts.** A nonparametric independent samples $t$ test revealed that the ER manuscripts that received an editor decision of accept or revise and resubmit ($M = 52.55, SD = 41.03$) contained statistically significantly more references ($U = 473.00, p = .018$) than did ER manuscripts that received an editor decision of reject ($M = 32.37, SD = 25.84$). The effect size associated with this difference was 0.67, which represents a medium-to-large effect. With respect to the number of references per page, a parametric independent samples $t$ test revealed no statistically significant difference ($t(32.59) = .98, p = .34$) in the number of references per page between ER manuscripts that received an editor decision of accept or revise and resubmit ($M = 1.54, SD = 0.85$) and ER manuscripts that received an editor decision of reject ($M = 1.34, SD = 0.74$).

**Discussion of Findings.** The present editorial is unique in at least five ways. First, it represents the only work wherein the number of citations has been examined in multiple journals (i.e., RITS, ER, JMMR) within the same framework. Second, it represents the only work in which the number of citations has been examined among both unpublished manuscripts and published articles. Third, this article is the first work in which both the number of references and number of references per page among unpublished manuscripts were examined. Fourth this editorial represents the first work to examine the link between number of references/number of references page and style guide errors—notably, citation errors—among manuscripts submitted to journals. Fifth, and most importantly, this editorial represents the first work to provide confidence intervals around the point estimates that index the number of references and number of references per page among unpublished manuscripts and published articles.

The major finding from this series of studies is that the number of references appears to play an important role with respect to the disposition of manuscripts submitted to journals. Specifically, the number of references contained in a manuscript statistically significantly and practically significantly predicts the editor’s decision for that manuscript. This finding is consistent with Petty et al.’s (1999) finding of a moderate-to-large and statistically significant relationship (i.e., $r = .43, p < .001$) between the number of references among the 749 manuscripts submitted to Personality and Social Psychology Bulletin and (a) the reviewers’ ratings of the literature review and (b) the reviewers’ rating of the conceptualization/theory/hypothesis component of the manuscript. However, the current finding contradicts Petty et al.’s (1999)
finding of a statistically non-significantly relationship between the number of references and both the reviewers’ recommendation and the editors’ decision. Notwithstanding, the current finding regarding the link between the number of references and manuscript adjudication is bolstered by the fact that this link was observed across two very different journals, namely, RITS and ER—with RITS publishing both empirical research articles and methodological/conceptual/theoretical articles, whereas, during the period for which Onwuegbuzie (2014d) collected his data, as specified by its editors, the Research News and Comment section of ER publishes articles reflecting on the policies, contexts, and ethics of education research. Manuscripts published in this section ‘analyze trends, policies, utilization, and controversies concerning education research. This section also provides an outlet for researchers and others summarizing policies, taking points of view, and suggesting ways to increase support, quality, visibility, and utilization of education research.’ Where appropriate, we believe it would be of interest for authors to consider issues regarding institutions charged with supporting research or influencing research policies (e.g., universities, federal and state departments of education, school districts, or funding agencies). (Elmore, Camilli, Onwuegbuzie, & Marlette, 2007, pp. 185-186)

Simply put, the editors of ER exclusively published essays, in stark contrast to RITS, in which more traditional articles are published. Despite these differences in article genre, the number of references was still a predictor of the disposition of the manuscript, with medium to large effect sizes.

Interestingly, although the number of references predicted the editor’s decision for both RITS and ER, the number of references per page did not for either journal. This finding is consistent with Lovaglia’s (1991) result that whereas the number of references presented in articles representing the field of sociology predicted the number of citations that they subsequently received over a 9-year period, the number of references per page did not. These two sets of findings (i.e., findings from the current study and Lovaglia [1991]) provide compelling evidence that it is the absolute citation rate (i.e., total number of references) and not the relative citation rate (i.e., number of references per page) that is important. Alternatively stated, in general, the relationship between the total number of references and the editor’s decision holds regardless of the length of the manuscript. And Onwuegbuzie’s (2014a) preliminary qualitative findings obtained via interviews of award-winning reviewers indicates that this relationship is causal. As such, the current results suggest that having too few citations likely places a manuscript at risk for rejection.

Moreover, it appears that citations are very influential for reviewers (Onwuegbuzie, 2014a; Petty et al., 1999). Importantly, adequate use of citations is consistent with the standards for reporting on empirical social science research, as specified in the seminal document developed by the Task Force on Reporting of Research Methods in American Educational Research Association (AERA) Publications and adopted by the AERA Council in 2006 (AERA, 2006). This document contains guidelines that apply to reports of education research grounded in the empirical traditions of the social sciences—whether the report represents qualitative, quantitative, or mixed or multimethod traditions. The standards state two overarching principles:

• First, reports of empirical research should be warranted; that is, adequate evidence should be provided to justify the results and conclusions.

• Second, reports of empirical research should be transparent; that is, reporting should make explicit the logic of inquiry and activities that led from the development of the initial interest, topic, problem, or research question; through the definition, collection, and analysis of data or empirical evidence; to the articulated outcomes of the study. (AERA, 2006, p. 33)

According to the authors of this document, “Reporting that takes these principles into account permits scholars to understand one another’s work, prepares that work for public scrutiny, and enables others to use that work” (AERA, 2006, p. 33). Interestingly, Onwuegbuzie (2014d) documented that 72.5% of manuscripts submitted to RITS \( (M = 4.99, SD = 7.40; \text{Range} = 0 \text{ to } 43) \) and 82.8% of manuscripts submitted to ER \( (M = 5.07, SD = 6.71; \text{Range} = 0 \text{ to } 38) \) contain at least one claim that is not supported by any citations.

Given the apparent importance of citations, the questions to be asked is, what is an optimal number of citations? Table 1 and Table 3 are very helpful for answering this question for RITS manuscripts. From Table 1, it can be seen that the 95% confidence interval (CI) for RITS manuscripts that are not rejected (i.e., receive an accept or revise and resubmit decision) suggests that the range of 34.36 to 47.53 provides a range for the minimum number of unique citations. Interestingly, using the all possible odds ratio technique advanced by Onwuegbuzie (2014b) reveals that, using the odds ratio as a criterion, the cut point for the number of references that maximally separates RITS manuscripts that are rejected from RITS manuscripts that are not rejected (i.e., receive an accept or revise and resubmit decision) is 45. That is, when RITS manuscripts with 45 or more references were
contrasted against RITS manuscripts with less than 45 references, the odds ratio was maximized at 2.52 (95% CI = 1.03, 6.19). Also, the difference between these two sets of RITS manuscripts is statistically significant, $X^2(1) = 6.06$, $p = .014$. Importantly, this cut point of 45 for the minimum number of references is significantly higher than is the 95% upper CI of 37.00 for the RITS manuscripts that were rejected. Interestingly, increasing the logical appeal of this cut point value, only four of the 36 RITS manuscripts that were rejected contained 45 or more references. Also, this cut point of 45 is within the 95% confidence CI for published RITS articles of 43.03 and 53.76 (cf. Table 3).

From Table 2, it can be seen that the 95% CI for ER manuscripts that are not rejected suggests that the range of 34.35 to 70.74 provides a range for the minimum number of unique citations. Further, the all possible odds ratio technique (Onwuegbuzie, 2014b) reveals that the cut point for the number of references that maximally separates ER manuscripts that are rejected from ER manuscripts that are not rejected is 61. That is, when ER manuscripts with 61 or more references were contrasted against ER manuscripts with less than 61 references, the odds ratio was maximized at 1.73 (95% CI = 1.03, 3.00). Also, the difference between these two sets of manuscripts is statistically significant, $X^2(1) = 7.55$, $p = .006$. Importantly, this cut point of 61 for the minimum number of references is significantly higher than is the 95% upper confidence limit of 38.77 for the ER manuscripts that were rejected. Further, increasing the logical appeal of this cut point value, only seven of the 87 ER manuscripts that were rejected contained 61 or more references.

Comparing the mean number of references of published and unpublished RITS manuscripts (cf. Table 1 and Table 3) reveals that published RITS articles are statistically significantly higher than are RITS manuscripts that were not rejected, $t(100) = 1.71$, $p = .004$, with a small-to-moderate effect size of 0.35. However, this difference should not be surprising because whereas published RITS articles represent the final version of the manuscript that was originally submitted, RITS manuscripts that were not rejected represent the initial submissions. Thus, this mean difference of 7.45 in the number of references indicates the review process, on average, leads to the addition of seven to eight citations.

That mixed research articles published in JMMR had a greater number of references than did published RITS articles—albeit not statistically significantly greater ($t(210) = 0.75$, $p = .23$, Cohen’s $d = 0.11$—has intuitive appeal because mixed researchers typically have to provide methodological references pertaining to qualitative, quantitative, and the mixed research phases of their studies. The statistically significant relationship that emerged between the number of references in JMMR published manuscripts and the number of authors also has intuitive appeal because mixed research studies more often than not involves the use of multiple researchers/authors (Onwuegbuzie, 2014c), who potentially each bring with them their own set of methodological citations.

**Conclusions**

Our current editorial provides compelling evidence that the number of references is an important determinant of the quality of a manuscript, likely because an adequate number of references gives reviewers and editors the impression that the manuscript has rigor and completeness. However, merely adding references is, by no means, not sufficient to improve the quality of a manuscript. Rather, authors should include only the most relevant citations that render a manuscript as being both warranted and transparent—as advocated by AERA (2006). These citations should be used to conduct operations such as to summarize, to frame, to support, to refute, to develop, and to expand assumptions, ideas, beliefs, propositions, theories, schemas, models, hypotheses, procedures, methodologies, findings, interpretations, conclusions, or the like that are made by the author(s) himself/herself/themselves, by the author(s) that is being cited, and/or by stakeholders. And for empirical reports, authors should not only provide an adequate number of citations in their literature review sections. Rather, as outlined by Onwuegbuzie and Frels (2015), they should provide relevant citations for as many of the 12 components of a primary research report as appropriate. Indeed, it is only by providing an adequate and relevant number of references throughout a manuscript that can authors appropriately situate their works within the extant literature.

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