The Trend of Research on Transformational Leadership Literature: A Bibliometric Analysis

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Abstract
The development of transformational research publication has increased gradually, and the trends were consistently rising. Therefore, the study aims to analyse the scientific literature published in the field of transformational leadership research. Scopus database was utilised to assemble literature on transformational leadership field based on the ‘keywords’ search results, and the study finalised 2,136 valid documents for further analysis. Authors then employed VOS viewer for data visualisation purpose. The results show an increase in the literature on transformational leadership from 1987 until now. However, the number was slightly lower in 2015. Various studies have been conducted on transformational leadership involving the collaboration of multi-authors. Most of the publications were published in English, with a total of 161 authors from 96 different countries and 162 institutions.

Keywords: transformational leadership, bibliometric analysis
1. Introduction

Transformational leadership has become a topic of interest in recent years. In today’s digital era, organisations in every industry are experiencing rapid changes. Scholars are paying more attention to transformational leadership because of its difference with traditional leadership styles (Judge & Piccolo, 2004; Kark et al. 2018). Transformation leadership theory attracts significant academic interest since its conception more than 40 years ago and appears to be one of the leadership models most widely investigated (Crede, Jong, & Harms, 2019; Dinh et al., 2014; Kammerhoff, Lauenstein & Schütz, 2019; Northouse, 2016).

This model is one of the most utilised of the current leadership models in contemporary discussions of leadership. It closely assesses how the leader motivates the follower to follow by inspiring them and improving the follower by coaching and mentoring them to a higher level of performance. According to the Bass, “transformational leadership is not a rare phenomenon, limited to a few extraordinary leaders, but, on the contrary, it can be found in different degrees in all kinds of groups and organisations” (Bass, 1985).

The development of transformational research publication has increased gradually, and the trends were consistently rising. The rising numbers of transformational leadership publication suggest that it has become a favourite topic among researchers. According to Bass (1985), it is one of the best methods to enhance individuals’ and group’s performance, in which leaders motivates followers to seek and explore new prospects. Thus, the idea that leaders turn followers in the circumstances leading to excellent organisational success offers a robust empirical groundwork for both research and practice.

A number of studies showed that the strategically driven dimension of transformational leadership has a beneficial impact on performance, talent management and competitiveness in the workforce (Carton, Murphy, & Clark, 2014; Jia, Liu, Chin, & Hu, 2018; Naderi, Vosta, Ebrahimi, & Jalilvand, 2019; Singh, Giudice, Chierici, & Graziano, 2020).

However, the evaluation of the proposed relationship was made via empirical research, which explains the primary foundation for this study employing a bibliometric approach; it aims to analyse the scientific literature published in the transformational leadership literature. Thus, the study addresses the following research questions:

1) What is the current trend in transformational leadership publication?
2) Which are the most influential articles on transformational leadership?
3) Which are the most popular themes of transformational leadership among scholars?
4) Who are the most influential authors of transformational leadership?
5) What is the current state of collaboration involving transformational leadership?
6) What is the intellectual structure of current research on transformational leadership?

The present paper consists of five sections: introduction, literature review, data and methods, results and discussion, and conclusion and limitation. The results and discussion section presents a comprehensive descriptive analysis according to documents and source types, the publication year, languages, sources of publication, institutional and geographical distribution,
subject area and the shift in its underlying intellectual structure. Finally, for future research consideration, we state our conclusions, limitation, and suggestions.

2. Literature Review

Transformational leadership is a popular and broadly researched topic in various disciplines (Arnold, Turner, Barling, Kelloway, & Mckee, 2007; Bass, 1995; Bass, Avolio, & Goodhein, 1987; Keller, 2006; Kirkbride & Kirkbride, 2006; Metwally & El-bishbishy, 2014). There has been substantial attention given to transformational leadership in the literature (Bass, 1985; Schmitt, Den Hartog, & Belschak, 2016). Bass and Riggio (2012) defined transformational leadership as a process that transformed people. The process includes making changes that would improve the effectiveness of the organisation and the followers’ performance by altering the latter’s self-concepts and values. The theory assumes that if leaders want to gain followers’ loyalty, they need to be respected, trusted, and appreciated; and everyone has to contribute (Northouse, 2012). Researchers argued that transformational leadership encourages subordinate commitment and more creative problem solving as well as improves performance (Mittal & Dhar, 2015; Yukl, 2013). It emphasises followers’ ethical behaviour, intrinsic motivation, leadership development among team members, and common goals and vision.

There are four components of transformational leadership were proposed by Bass and Avolio (2000). Transformational leadership is those showing idealised influence, inspirational motivation, intellectual stimulation, and individual consideration. They lead others in time of need by creating a vision and encouraging spirituality among subordinates to achieve competitive goals (Mullen, Kelloway, & Teed, 2017). According to Yukl (1999), when investigating contextual influences, specific forms of transformational leadership behaviours must be carefully considered because different kind of transformational leadership behaviour will be relevant in a different situation. It is not a case of ‘one size fits all.’

The first component of idealised influence refers to leaders developing and showing high moral values, ethics, and trust among followers and leaders (Guay, 2013). Leaders demonstrate a strong dedication and courage to achieve goals, practice excellent standards of good ethical principles and behaviour that consist of self-sacrifice for others’ benefit, consider subordinates’ needs, and communicate challenges and achievements with subordinates (Limsila & Ogunlana, 2008).

Next component is inspirational motivation, referring to leaders’ desire and determination in developing a vision and motivating their followers (Bi et al., 2012). Inspired leaders produce quality followers, enthusiastic about achieving goals, and create meaningful tasks (Bacha, 2014).

The third component is intellectual stimulation, whereby leaders stimulate their followers’ mind and ability to be more creative and critical. They motivate followers’ innovativeness and creativity through resolving current circumstances differently and challenging theories (Elkins & Keller, 2013; Sundi, 2013). These leaders also encourage followers to attempt new strategies while focusing on reasonableness.

The fourth component is individual consideration, whereby the followers received support and guidance from their leader (Puccio et al., 2011). The leaders render individual
consideration towards their followers’ unique ability and skill to determine their development requirements; the leaders also consider the followers’ differences (Bi et al., 2012). In a nutshell, leaders build a meaningful personal connection with every follower, mindful of their individual’s achievement and growth by becoming a mentor or coach.

The transformational leadership dimensions emphasise a strong bond between leaders and followers; followers are inspired and motivated by the leaders’ vision, moral and ethical standard. Empirical evidence shows that transformational leadership will help elevate efficiency and effectiveness within organisational compared to other types. Leaders’ high standards would inspire followers to endure obstacles; hence, resulting in an outstanding organisational performance (Buon, 2014). Notably, transformational leaders change circumstances through developing a vision and persuading followers to accept a concept (Lussier & Achua, 2007).

Based on the discussions, transformational leadership possesses specific characteristics, thus, making it unique compared to other leadership styles. Typically, transformational leadership inspires followers through individual support, imperative vision, and empowerment. Transformational leadership encompasses four behaviours: idealised influence, inspirational motivation, intellectual stimulation and individual consideration. Zhu et al. (2005) noted that transformational leadership encourage a higher level of inspiration, trust, unity, commitment, and performance. For instance, the transformational leadership effect use by Richard Branson in the Virgin group was evident in the firm’s performance (Artur, 2008). The outcome could be attributed to the transformational leadership approach used by Branson in his management style. In sum, transformational leadership is one of the best leadership theories that current managers should consider (Barney, 2010).

3. Data and Methodology

Bibliometric methods originate from research in the library and information sciences involving a massive volume of bibliographic materials (Broadus, 1987; Pritchard, 1969). Besides analysing, bibliometric studies also classify bibliographic material by framing representative summaries of the existing literature. Previous studies employed this technique to analyse journals (Martínez-López et al., 2018; Valenzuela et al., 2017; Valenzuela-Fernandez, Merigó, Lichtenhal, & Nicolas, 2019), universities (Merigó, Muller, Modak, & Laengle, 2019), countries (Cancino, Merigó, & Coronado, 2017; Mas-Tur et al., 2019), and topics (Albort-Morant & Ribeiro-Soriano, 2016; Blanco-Mesa, Merigó, & Gil-Lafuente, 2017; Chung & Cox, 1990; Gurzki & Woisetschläger, 2017; Rey-Martí, Ribeiro-Soriano, & Palacios-Marqués, 2016).

A bibliometric study is gaining fame as one of the methods used to reveal the study trend (Ahmi & Mohammad, 2019) and lately, it has been extensively used in the Management field. It is an alternative means to the standard literature review (Ferreira, Li, Reis, & Serra, 2014). Bibliometrics consist of the “quantitative study of bibliographic units, or physical published units, or the surrogates of either” (Broadus, 1987). The bibliometric analysis provides the publications’ descriptive patterns based on a field, domain, period, country, or among all preceding. Moreover, a methodical approach used in the bibliometric analysis could acquire more detailed information on the publications, such as keywords frequency, authors, and the
number of citations (Rusly et al., 2019). Various indicators have been used in bibliographic studies. Ahmi and Mohammad (2019) reported that among the most commonly examined aspects include publication outlet, type of publication, authorship, affiliation, country and h-index.

Based on the above and following the applications of the literature concepts, the Scopus bibliometric analysis, both in descriptive and network analyses, is presented. The descriptive analyses encompass the whole publications, citations per publication, and citations. The productivity and impact are explained in the h-index, a g-index, and m-index forms (Ding & Cronin, 2011; Egghe, 2006; Hirsch, 2005; Tsay, 2009). Generally, h-index is measured as h number of publications with at least h citations. g-index indicates the g number of highly cited articles with at least g² citations, and, as a composite of both h and g, m-index in our study is calculated as “h” and “g”.

Besides the descriptive analyses, the network analyses comprise co-occurrence and bibliographic co-citations. The VOSviewer uses two standardised weights, the links’ total strength and numbers, to visualise the nodal network graphically. The size of the interlacing lines connecting the nodes and the nodes’ size denotes the strength and relevance of the links.

Meanwhile, Scopus is the largest scholarly works database (DuránSánchez, Del Río-Rama, Álvarez-García, & García-Vélez, 2019). It is also the most extensive searchable abstract and citation (Chadegani, 2013). This database was employed as the platform to extract prior works on web accessibility. The database supplies publication details that include the year, access type, subject area, author name, source title, document type, keywords, country, affiliation, language, and source type. We restricted the search of web accessibility studies according to titles to specify further the relevant academic works on the domain examined. The current study focused only on papers related to transformational leadership based on the title of the papers because of the massive number of researches on organisational leadership (Long et al., 2014). Thus, this query was performed: (TITLE (“Transformational leadership”). Scopus reveals 2,136 documents have been published between 1987 and 2020; 1,822 articles, 127 conference paper, 78 reviews, 65 book chapter, 13 Editorials, eight notes, seven erratum, five books, three retracted and one letter, data paper, short survey, and five undefined types. All these documents were considered included in the analysis.

4. Results

The analysed extracted erudite papers consist of document types and types of source, yearly progress, languages used in the published papers, subject area, analysis of keywords, the productivity of countries, analysis of authorship and citation report. The findings are mostly presented in percentage and frequency. Meanwhile, we present the annual growth data as some retrieved documents per year, including their frequency, percentage and cumulative percentage until July 2020. The citation analysis is reported as citation metrics, and the top 20 most cited papers in web accessibility are disclosed as well.
4.1 Evolution of Publication

In 2010, the related publications increased rather slowly; but it increased radically afterwards (refer to Figure 1). It was anticipated that the publication would increase even more in 2019. For 2020, despite the year is still running, several publications have been scheduled and indexed in the Scopus database. The first research on transformational was published in 1987 by Bass et al. (1987) with their paper titled, “Transformational Leadership and the Falling Dominoes Effect”.

![Figure 1. The growth of transformation leadership publications, 1987-2020 (n=2136)](image)

4.2 Document and Source Types

This study found 13 types of published documents related to transformational leadership, namely article, conference paper, review, book chapter, editorial, note, erratum, book, retracted, data paper, letter, short survey and undefined. Based on Table 1, most of the publications were articles, which account for 1,822 (85.30%), followed by conference papers, 127 (5.95%). Collectively, the other types of documents comprise almost 187 or 8.75%, whereby every type of document type accounted for less than 5%. The three document types with the lowest percentage (less than 1% each) were data papers, letter, and short survey. Five of the publications were undefined by Scopus.
Table 1. Document type

| Document Type  | Total Publication | Percentage (%) |
|----------------|-------------------|----------------|
| Article        | 1822              | 85.30          |
| Conference Paper| 127               | 5.95           |
| Review         | 78                | 3.65           |
| Book Chapter   | 65                | 3.04           |
| Editorial      | 13                | 0.61           |
| Note           | 8                 | 0.37           |
| Erratum        | 7                 | 0.33           |
| Book           | 5                 | 0.23           |
| Retracted      | 3                 | 0.14           |
| Data Paper     | 1                 | 0.05           |
| Letter         | 1                 | 0.05           |
| Short Survey   | 1                 | 0.05           |
| Undefined      | 5                 | 0.23           |
| **Total**      | **2136**          | **100.00**     |

Table 2 shows six types of source. Journal is the highest source type (90.40%), and the second-highest was conference proceedings with 5.62%. Also, books, book series, and trade publications contributed to the number of documents; 3.00%, 0.70%, and 0.23%, respectively. Undefined source type contributed only one publication.

Table 2. Source type

| Source Type          | Total Publications (TP) | Percentage (%) |
|----------------------|-------------------------|----------------|
| Journal              | 1931                    | 90.40          |
| Conference Proceeding| 120                     | 5.62           |
| Book                 | 64                      | 3.00           |
| Book Series          | 15                      | 0.70           |
| Trade Journal        | 5                       | 0.23           |
| Undefined            | 1                       | 0.05           |
| **Total**            | **2136**                | **100.00**     |

4.3 Languages of Document

Table 3 illustrates that the majority of the retrieved articles were published in the English language (96.89%). However, there were dual-language documents published as well, namely English and Spanish (8); English and Turkish (2); English and French (2); English and Chinese (1); English and Dutch (1); English and German (1); English and Russian (1); and English and Ukrainian (1). Several documents were published in a single language, namely German, Chinese, Russian, Korean, Turkish, Malay, French, Lithuanian, Croatian, Serbian,
and Spanish. The rarest languages used in the articles gathered are the Czech and Turkish languages.

Table 3. Languages used for publications

| Language  | Total Publications* | Percentage (%) |
|-----------|---------------------|----------------|
| English   | 2086                | 96.89          |
| Spanish   | 27                  | 1.25           |
| German    | 8                   | 0.37           |
| Portuguese| 7                   | 0.33           |
| Chinese   | 6                   | 0.28           |
| French    | 4                   | 0.19           |
| Korean    | 3                   | 0.14           |
| Turkish   | 3                   | 0.14           |
| Lithuanian| 2                   | 0.09           |
| Malay     | 2                   | 0.09           |
| Croatian  | 1                   | 0.05           |
| Dutch     | 1                   | 0.05           |
| Russian   | 1                   | 0.05           |
| Serbian   | 1                   | 0.05           |
| Ukrainian | 1                   | 0.05           |
|           | 2153                | 100.00         |

Notes: 17 documents have been prepared in dual language

4.4 Subject Area

The current paper also presents the published articles according to their respective field. The majority of research on transformational leadership was in the area of business, management, and accounting, representing 1,213 or 33.41% of the total articles, followed by social science 715 or 19.69%, and psychology 479 or 13.19%. Other subject areas covered in transformational leadership research are included in Table 4.

Table 4. Subject area

| Subject Area                                | Total Publications | Percentage (%) |
|---------------------------------------------|--------------------|----------------|
| Business, Management and Accounting         | 1213               | 33.41          |
| Social Sciences                             | 715                | 19.69          |
| Psychology                                 | 479                | 13.19          |
| Nursing                                     | 171                | 4.71           |
| Arts and Humanities                         | 156                | 4.30           |
| Economics, Econometrics and Finance         | 154                | 4.24           |
| Subject Area                              | Total Publications | Percentage (%) |
|------------------------------------------|--------------------|----------------|
| Medicine                                 | 153                | 4.21           |
| Decision Sciences                        | 142                | 3.91           |
| Engineering                              | 124                | 3.42           |
| Computer Science                         | 118                | 3.25           |
| Environmental Science                    | 53                 | 1.46           |
| Energy                                   | 35                 | 0.96           |
| Multidisciplinary                        | 25                 | 0.69           |
| Agricultural and Biological Sciences     | 19                 | 0.52           |
| Mathematics                              | 18                 | 0.50           |
| Biochemistry, Genetics and Molecular Biology | 13               | 0.36           |
| Health Professions                       | 10                 | 0.28           |
| Earth and Planetary Sciences             | 7                  | 0.19           |
| Physics and Astronomy                    | 7                  | 0.19           |
| Materials Science                        | 5                  | 0.14           |
| Chemical Engineering                     | 4                  | 0.11           |
| Pharmacology, Toxicology and Pharmaceutics | 4                | 0.11           |
| Chemistry                                | 3                  | 0.08           |
| Neuroscience                             | 2                  | 0.06           |
| Veterinary                               | 1                  | 0.03           |
|                                           | 3631               | 100.00         |

4.5 Geographic Distribution of Publication and Affiliation

Scholars from 96 different countries contributed to the retrieved publications. Table 5 presents the list of the top 20 countries contributing to the publications in transformational leadership. The USA was ranked the top with 597 publications, followed by China (183), the UK (138), and Malaysia (131). For the total citations per country, the USA is ranked the top with 31,769 citations, while Canada (8,900) is in the second place.

Table 5. Top 20 Countries contributed to the publication

| Country                  | Total Publications | %   | Total Citations |
|--------------------------|--------------------|-----|-----------------|
| United States            | 597                | 22.09| 31769           |
| China                    | 183                | 6.77 | 4596            |
| United Kingdom           | 138                | 5.11 | 4447            |
| Malaysia                 | 131                | 4.85 | 1115            |
| Canada                   | 127                | 4.70 | 8900            |
| Australia                | 107                | 3.96 | 4831            |
| Germany                  | 97                 | 3.59 | 3331            |
| Country     | Total Publications | %  | Total Citations |
|------------|--------------------|----|-----------------|
| Taiwan     | 96                 | 3.55 | 4079           |
| Indonesia  | 83                 | 3.07 | 1600           |
| India      | 83                 | 3.07 | 99             |
| South Korea| 72                 | 2.66 | 1814           |
| Netherlands| 63                 | 2.33 | 1814           |
| Pakistan   | 59                 | 2.18 | 4215           |
| Iran       | 56                 | 2.07 | 916            |
| Spain      | 50                 | 1.85 | 1759           |
| Turkey     | 44                 | 1.63 | 1903           |
| Hong Kong  | 40                 | 1.48 | 3627           |
| Thailand   | 31                 | 1.15 | 1336           |
| Israel     | 27                 | 1.00 | 3333           |
| Denmark    | 26                 | 0.96 | 997            |

Table 6 displays the top ten institutions that made publications on transformational leadership; the Binghamton University State University of New York is ranked first, followed by The Stephen J. R. Smith School of Business, and Arizona State University. Notably, publication on transformational leadership is found worldwide and not concentrated in a specific region.

Table 6. Most influential institutions with a minimum of five publications

| Affiliation                                           | Country                  | TP | TC    |
|-------------------------------------------------------|--------------------------|----|-------|
| Binghamton University State University of New York    | United State of America  | 37 | 6867  |
| The Stephen J. R. Smith School of Business            | Canada                   | 24 | 3023  |
| Arizona State University                              | United State             | 22 | 1605  |
| Universiti Teknologi Malaysia                          | Malaysia                 | 22 | 163   |
| Universiti Utara Malaysia                              | Malaysia                 | 19 | 36    |
| The University of Queensland                           | Australia                | 18 | 1033  |
| Hong Kong Polytechnic University                       | Hong Kong                | 17 | 1158  |
| Queen’s University, Kingston                           | United Kingdom (UK)      | 17 | 1842  |
| Universiti Sains Malaysia                              | Malaysia                 | 16 | 96    |
| Saint Mary’s University                                | Canada                   | 16 | 1988  |

Notes: TP=Total Publications; TC=Total Citations

4.6 Authorship Analysis

This study also analyses the most active authors in publishing documents on transformational leadership. Table 7 listed the most active authors with a minimum of five publications. Based on the table, Barlin, J., Avolio, B.J., Bass, B.M. and Turner, N. are among the top authors in this field of research with more than ten publications on transformational leadership. Total
citations indicate the number of times the papers on transformational leadership were cited by other papers listed in Scopus. Although Barlin, J. contributed the most articles, the author’s works did not get the highest citation. However, Bass B. M. was the top highest cited publications. Hence, indicating that the number of publications did not correlate with the number of citations. Notably, older publications tend to have more chances of being cited than latter publications. Its might be the reason for Bass B.M being the most cited because he was the first to developed the theory of transformational leadership to business organisations.

Table 7. Most productive authors

| Author       | TP | NCP | TC    | C/P    | C/CP   | h   | g   |
|--------------|----|-----|-------|--------|--------|-----|-----|
| Barling, J.  | 25 | 25  | 3089  | 123.56 | 123.56 | 18  | 25  |
| Avolio, B.J. | 19 | 18  | 4679  | 246.26 | 259.94 | 17  | 19  |
| Bass, B.M.   | 17 | 17  | 5579  | 328.18 | 328.18 | 17  | 17  |
| Turner, N.   | 15 | 14  | 1147  | 76.47  | 81.93  | 13  | 15  |
| Krishnan, V.R.| 13 | 13  | 259   | 19.92  | 19.92  | 8   | 13  |
| Nielsen, K.  | 11 | 10  | 713   | 64.82  | 71.30  | 9   | 11  |
| Sosik, J.J.  | 11 | 11  | 1089  | 99.00  | 99.00  | 10  | 11  |
| Walumbwa, F.O.| 11 | 11  | 1469  | 133.55 | 133.55 | 10  | 11  |
| Arnold, K.A. | 10 | 10  | 641   | 64.10  | 64.10  | 7   | 10  |
| Rowold, J.   | 10 | 9   | 170   | 17.00  | 18.89  | 7   | 10  |

Notes: TP=total number of publications; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; h=h-index; and g=g-index.

Table 8 presents the number of authors per article. A total of 1,687 (78.45%) documents were multi-authored publications, while only 21.55% were single-authored publications

Table 8. Number of Author(s) per document

| Author Count | Frequency | %  |
|--------------|-----------|----|
| 0            | 13        | 0.61|
| 1            | 426       | 19.94|
| 2            | 635       | 29.73|
| 3            | 577       | 27.01|
| 4            | 308       | 14.42|
| 5            | 117       | 5.48 |
| 6            | 40        | 1.87 |
| 7            | 12        | 0.56 |
| 8            | 5         | 0.23 |
| 10           | 2         | 0.09 |
4.7 Keyword Analysis

The VOSviewer, a software tool to construct and visualise the bibliometric networks, was used to map the authors’ keywords. Figure 2 illustrates the authors’ keywords of network visualisation, whereby colour, font size, square size, and thickness of connecting indicate the keywords associations. For instance, keywords with similar colour were generally listed together. Thus, by using VOSviewer, the generated figure displays the keywords’ co-occurrence that appeared at least 25 times in SCOPUS, which is papers published from the period of 1987 to 2017. Word combinations, such as organisational justice, higher education, employee engagement, organisational commitment, psychology safety shared a similar colour (green), show stronger associations with higher frequency co-occurrence from the year 1987 to 2020.

![Network visualisation map of the author keywords](image)

Meanwhile, leadership, job satisfaction, organisation and management, organisational innovation, organisational culture, motivation, innovation are among the keywords with the highest occurrences after removing core keywords specified in the search query, which is transformational leadership. Table 9 shows the top 20 keywords used in transformational leadership studies.
Table 9. Top keywords

| Rank | Keywords                              | Frequency |
|------|---------------------------------------|-----------|
| 1    | Leadership                            | 518       |
| 2    | Job Satisfaction                      | 109       |
| 3    | Organisation and Management           | 84        |
| 4    | Organisational Innovation             | 84        |
| 5    | Organizational Culture                | 76        |
| 6    | Motivation                            | 68        |
| 7    | Innovation                            | 67        |
| 8    | Organisational Commitment             | 64        |
| 9    | Emotional Intelligence                | 61        |
| 10   | Transactional Leadership              | 50        |
| 11   | Work Engagement                       | 44        |
| 12   | Trust                                 | 43        |
| 13   | Creativity                            | 40        |
| 14   | Employee                              | 39        |
| 15   | Personnel Management                  | 39        |
| 16   | Psychological Aspect                  | 39        |
| 17   | Knowledge Sharing                     | 38        |
| 18   | Psychology                            | 37        |
| 19   | Performance                           | 36        |
| 20   | Job Performance                       | 32        |

4.8 Citation Analysis

The Harzing’s Publish or Perish software was employed to obtain the citation metrics of data retrieved. Data collected from the Scopus database were imported to the software for generating the citation metrics. The citation metrics of the retrieved articles were summarised, as of 22 July 2020, which is illustrated in Table 10. The summary comprises the total number of citations, including the year of citation, citations per paper, and citations per author.

Table 10. Citations metrics

| Metrics            | Data        |
|--------------------|-------------|
| Publication years  | 1987–2020   |
| Citation years     | 33          |
| Papers             | 2136        |
| Citations          | 64460       |
| Citations/year     | 1953.33     |
| Citations/paper    | 30.18       |
Table 11 illustrates the top 10 most quoted papers (according to the numbers of citation of the respective articles), based on Scopus database. The document entitled “Impact of transformational leadership on follower development and performance: A field experiment” by Dvir T., Eden D., Avolio and Shamir (2002) was the most cited (863 times, 47.94 citations yearly, on average).

Table 11. Top 10 articles with the highest number of citation

| No | Document title                                                                 | Authors                      | Year | Source                          | TC    | C/Y   |
|----|--------------------------------------------------------------------------------|------------------------------|------|--------------------------------|-------|-------|
| 1  | Impact of transformational leadership on follower development and performance: A field experiment | T. Dvir, D. Eden, B.J. Avolio, B. Shamir | 2002 | Academy of Management Journal | 863   | 47.94 |
| 2  | Transformational leadership and job behaviours: The mediating role of core job characteristics | R.F. Piccolo, J.A. Colquitt  | 2006 | Academy of Management Journal | 272   | 59.71 |
| 3  | Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy | Y. Gong, J.-C. Huang, J.-L. Farh | 2009 | Academy of Management Journal | 745   | 67.73 |
| 4  | Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organisational citizenship behaviour | H. Wang, K.S. Law, R.D. Hackett, D. Wang, Z.X. Chen | 2005 | Academy of Management Journal | 714   | 47.6  |
| 5  | Transformational leadership, conservation, and creativity: Evidence from Korea | S.J. Shin, J. Zhou           | 2003 | Academy of Management Journal | 714   | 42    |
| 6  | The two faces of transformational leadership: Empowerment and dependency       | R. Kark, B. Shamir, G. Chen  | 2003 | Journal of Applied Psychology | 684   | 40.24 |
| 7  | The role of transformational                                                 | D.I. Jung, C.               | 2003 | Leadership                      | 663   | 39    |
| Leadership in enhancing organisational innovation: Hypotheses and some preliminary findings | Chow, A. Wu | Quarterly |
|---|---|---|
| Transformational leadership and organisational commitment: Mediating role of psychological empowerment and moderating role of structural distance | B.J. Avolio, W. Zhu, W. Koh, P. Bhatia | 2004 | Journal of Organizational Behavior |
| Development and test of a model linking safety-specific transformational leadership and occupational safety | J. Barling, C. Loughlin, E.K. Kelloway | 2002 | Journal of Applied Psychology |
| Transformational leadership, creativity, and organisational innovation | L. Gumusluoglu, A. Ilsev | 2009 | Journal of Business Research |

5. Discussion

The current study presents a bibliometric review to gain a better understanding of the trends, forecast, historical analysis, and contributions of the transformational leadership literature. Earlier studies on the topic began in 1987, and it has been growing yearly. The number of publications increased significantly in 2019 with a total of 235 publications against 187 publications in 2018. Publications on transformational leadership were expected to increase even more in 2019; by July 2020, the total number of publications has already reached 195. A possible explanation for the growth is the researchers’ attention on the investigation of transformational leadership has grown because its role in performance was beyond expectations over the past quarter-century (Seibert et al., 2011). Notably, the main content of transformational leadership literature is the potential performance implications of transformational leadership. The primary research on transformational leadership explored the anticipated role that went beyond transformational leadership in performance across criterion types, various methods of study, levels of analysis in diverse settings. Most of the articles related to transformational leadership were written by multiple authors. The publications’ impact on transformational leadership can be seen from the citation metric disclosed in this paper. Based on the 33 years of publications (1987–2020), a total of 2,136 documents have been published with 64460 citations recorded, which translated into 1953.33 citations per year, 30.18 citations per paper and 2.64 authors per paper for documents assembled from the Scopus database on transformational leadership.

The geographic distribution of the literature indicates that the highest number of publications are from the United States of America (USA); likewise, the number of citations is the highest as well, compared to other developed countries, such as China and the United Kingdom (UK).
Thus, we suggest that transformational studies need to be performed in Asians countries, such as Thailand, Malaysia, and Indonesia, considering the global effect of the rapid and ever-changing economic and politic landscape.

Since the publication of Bass (1985) influential work, numerous studies have noted transformational leadership prevalent and positive effects on the followers’ motivational and attitudinal results, such as satisfaction with the leader (Bono & Judge 2003), effort (Weiß & Süß 2016), job satisfaction (Braun et al., 2013), organisational commitment (Avolio et al., 2004), motivation (Charbonneau et al., 2001); followers’ behavioural results, such as creativity (Gong et al., 2009; Bednall et al., 2018), performance (Wang et al., 2005); and leaders’ results, such as effective leaders (Erkutlu 2013), job performance of leaders (Deinert et al., 2015). These outcomes are similar to the current study, which emphasise the transformational leadership research is mostly associated with leadership style, job satisfaction, organisation and management, organisational innovation, organisational culture, motivation, innovation based on the keyword used by the author.

Thus, this study concludes that transformation leaders have a strong view of the current and future course of action of a company in the face of competitive markets. Transformational leadership has the capacity to deliver out of reach. Transformational leadership generates an ambitious dream, obviously believes in that vision, articulates it, and expresses explicitly it to the employees.

One of the identified limitations is the database used. Therefore, despite Scopus being the most extensive databases, unindexed journals are aplenty that they should not be disregarded. Additionally, only articles mentioning transformational leadership on their titles were considered for the current study. Thus, transformational leadership literature that did not overtly have such words in their title were ignored. Notably, the search query is never utterly perfect, false positive and false negative results may occur. Future studies should expand the search query to other available databases, such as Google Scholar, Web of Science, and Dimensions. Combining all of these databases would possibly contribute to more exciting and invaluable results.

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