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The Research Topics of Leadership: Bibliometric Analysis from 1923 to 2019.

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Abstract

Leadership phenomenon is characterized by unflagging interest among scientists in the field of management and education. This is one of the reasons why various theories, concepts and topics of leadership are propounded in literature. The current paper examined the trends of leadership publications, the most common topics of leadership, and whether the research topics have followed a coherent progression. A literature review was conducted in order to understand what has been done until now. Using a bibliometric analysis, the current paper summarized 12,235 publications on leadership from the Web of Science database, spanning the period from 1923 to 2019. The findings obtained indicate growing number of leadership publications and the following research topics: leadership management, leadership performance, leadership model, leaders' behaviors, leaders' personalities and team leadership which are related to each other. Moreover, the results also show a weakening interest in 'hard' aspects of leadership in a 'soft' direction.

Keywords: Leadership, leader, leadership theories, bibliometric analysis.

Los temas de investigación del liderazgo: análisis bibliométrico de 1923 a 2019.

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Resumen

El fenómeno del liderazgo se caracteriza por un interés constante entre los científicos en el campo de la gestión. Esta es una de las razones por las cuales se proponen varias teorías, conceptos y temas de liderazgo en la literatura. Esto provoca la necesidad de integración de muchas áreas y perspectivas. El documento actual examinó las tendencias de las publicaciones de liderazgo, los temas más comunes de liderazgo y si los temas de investigación han seguido una progresión coherente. Se realizó una revisión de la literatura para comprender lo que se ha hecho hasta ahora. Utilizando un análisis bibliométrico, el documento actual resumió 12,235 publicaciones sobre liderazgo de la base de datos de Web of Science, que abarca el período de 1923 a 2019. Los resultados obtenidos indican un número creciente de publicaciones de liderazgo y los siguientes temas de investigación: gestión de liderazgo, desempeño de liderazgo, modelo de liderazgo, comportamientos de líderes, personalidades de líderes y liderazgo de equipo que están relacionados entre sí. Además, los resultados también muestran un interés debilitado en los aspectos "duros" del liderazgo en una dirección "blanda".

Palabras clave: Liderazgo, líder, teorías de liderazgo, análisis bibliométrico.

The constantly growing number of publications indicates unwavering interest in leadership and the constant pursuit of better recognition of this phenomenon. Over the past four decades, there have been many theoretical leadership approaches (from Great Men Theory to Leadership as a process), and more concepts are being developed that make up these perspectives. Dinh et al., (2014) identified 66 separate leadership theories in the published literature since 2000. The multidirectional research of leadership enforces the need for integration of many areas and perspectives (Avolio, 2007; DeRue, Nahrgang, Wellman & Humphrey, 2011). A lot of leadership styles and contextual factors (e.g., historical, biographical, environmental, situational) have also emerged that determine effective leadership styles. However, some theoreticians and academicians have claimed that new leadership theories are a form of self-replicating of the old theories (Uslu, 2019). Thus, is very important to know whether topics of leadership are being repeated or are new ideas and concepts being introduced. This is also important from a point of view of education. Over the last decades, scholars have focused on how to develop leaders by increasing leadership knowledge, skills and competences. The knowledge about the directions of leadership development affects managerial programs that can offer “the right development programs for the right people at the right time” (Collins & Holton, 2004, p. 240).

Thus, the aim of the current study was to present a general overview of leadership theories from classical to modern in summary manner and analyze leadership trends from 1923 to 2019. Then, indication of the most frequently topics of leadership, and the changes in undertaking the research topics during the studied period in order to answer to the following questions: What are the research trends of leadership publications? What are the most common topics of leadership? Have the research topics of leadership followed a coherent progression?

Theoretical Background

Different classifications of leadership theories exist in publications in the field of management. However, the most commonly cited general theories are: Great Men Theory, Trait Theory, Behavioral Theory, Contingency Theory and Leadership as a process. There are many concepts and models that make up the general theories. The knowledge about the theories and models and their assumptions are important in order to understand the research topics undertaken on leadership literature during the years. It is expected that the topics raised by leadership practitioners and theorists are consistent with the emergence and development of that leadership theories.

One of the first theories is Great Man Theory. The term of this theory has been originally associated with the historian Carlyle who analysed great historical leaders like Napoleon, Muhammad, Jesus Christ, Alexander the Great and Winston Churchill; and claimed that, “the history of the world is but the biography of great men” (Carlyle, 1841, p. 127). This theory suggests that there is an inimitable set of features that distinguish great men from ordinary people and make them natural leaders (Carlyle, 1993; Harrison, 2018). It means that not everyone can be a leader because leadership is something that cannot be learned (Uslu, 2019). It is a gift from God to man (Spector, 2016). Therefore, research issues in leadership focused on analyzing what makes someone a leader. This has led to the emergence of trait theory.

Researchers turned their attention to the search for universal leadership qualities. The first research indicated that such leadership characteristics as intelligence, intuition, responsibility, sociability, insistence on dealing with problems, self-confidence and agility in meeting the needs of others (Stodgill, 1948), and intelligence, masculinity, adjustment, dominance, extroversion and conservatism were the traits of leaders (Mann, 1959). Further research conducted under trait theory pointed out many other traits, including inherited traits like height, weight, gender, attractiveness (Harrison, 2018) or emotional stability, integrity, self-defense, sense of responsibility, interpersonal skills and the right cognitive or technical skills (Van Velsor, McCauley & Ruderman, 2010). One of the most widely explored topic was also leadership

charisma (House, 1977; Bryman, 1992; Gardner & Avolio, 1998). The concept of House's charismatic leadership assumes that charismatic leaders have specific personality traits that are different from non-charismatic leaders. Research within the trait theory is still being conducted in order to bring new characteristics of a leader which are more current in contemporary organization management. Thus, the list of leadership traits is expanding. Moreover, the lists of leadership traits is divergent in various studies (Fleor, 2006). In addition, a research which focused on the traits that distinguished non-leaders from leaders indicated that only minor variances exist between followers and leaders (Burns, 2003). Therefore, instead of looking for the secrets of leadership in traits, researchers have shifted their interests to the behavior of leaders. This has provided the basis for the emergence of behavioral theory.

Most researches have been focused on behavior - what a leader does and what a leader should do to be effective, and finally what is the most effective leadership style. Many studies on leadership were done by the Ohio State University in 1945 and by the Michigan University in 1950 to identify observable behaviors of leaders. Ohio State Model indicated two dimensions that determine leadership style: consideration (people oriented behavioral leaders) and initiating structure (task oriented leaders). Michigan Model introduced the third style - participative leadership (or democratic leadership) as a new concept. Many further studies have researched on the effects of participative leadership on organizations and employees. The research is still continued. Current studies have examined for example, the relationships between participative leadership and such variables as: employees' work engagement and job satisfaction (Chan, 2019), individual-level employee ambidexterity (Chang, Hodgkinson, Hughes & Chang, 2019), employee exploratory innovation (Chang et al., 2019), performance of the top management team (Eva et al., 2019) and many others. The research under behavioral theory concluded that leadership is something that can be learned (Goff, 2003). However, the biggest complaint is that there is no one best style of leadership (Gill 2011; Northouse, 2010) because of environmental factors that are important in explaining what effective leadership is. The attempt to explain that was taken under contingency leadership theory.

According to the contingency theory, a leader may be effective in certain conditions or environments, but in other conditions or environments this leader can be ineffective. That means that there is no single right way to become an effective leader. Most of the research conducted at that time was focused on seeking various environmental and situational factors and their impact on the effectiveness of leaders. Fiedler's Contingency Theory is a common reflection of these views. It takes into account both the leadership style preferred by the individual, as well as various aspects of the situations that determine this style. According to Fiedler's theory, effective leadership depends on the leader-follower relations, the task structure, and the position power of the leader. Many others studies have developed the contingency theory and add a number of variables, including the personal characteristics of the leader, the characteristics of the followers or group, the structural characteristics of the organization, the nature of the objectives and the past experiences of the leaders and followers (Yukl, 1989), leadership styles, leader's qualities and a specific situation (Lamb, 2013), qualities of followers (Charry, 2012), or maturity (readiness) of followers according to the Hersey-Blanchard Situational Leadership Model (Daft, Kendrick & Vershinina, 2010; Robbins, 2001). The contingency theory has been criticized to be built on a lot of factors that make the leadership style effective (Kraft, 2018). Moreover, a leadership style that has been effective in the past may not be effective today (Fiedler, 2006).

From the 1970s and 1980s, researchers turned their attention to leader-followers relationship and made an attempt to understand leadership through the perspectives of followers (Yukl 2010, Felfe & Peterson, 2007). The leadership theories that emerged during this period were activated to diverge from the centre-oriented perspective of leadership (specific perspectives of the leaders, their traits, personality and behavior) to the followers relationship-oriented perspective (practices that concentrated further on the exchanges between the followers and leaders). During this time, concepts such as: servant leadership (Greenleaf, 1977), transactional and transformational leadership (Burns, 1978; Bass, 1996) and then, ethical leadership (Brown, Treviño & Harrison, 2005), authentic leadership (George, 2003), or spiritual leadership (Fry, 2003) were developed.

The servant leaders focus on the needs and the anxieties of the follower, sympathize with them and care about them (Udani & Lorenzo-Molo, 2013). Many studies have investigated the impact of servant leadership style on job satisfaction (Barbuto & Wheeler, 2006; Mayer, Bardes & Piccolo, 2008; Donghong, Haiya, Yi & Qing, 2012). Transactional and transformational leadership terms were first used by Burns (1978), who based his theory on the qualitative research of the biographies of political leaders and described two types of leadership styles. Transactional leadership is primarily passive (Odumeru et al., 2013) and focuses on the role of supervision, organization, and group performance (Kabeyi, 2018). In turn, transformational leaders pay attention to developmental needs of individual followers and inspire followers to put out extra effort to achieve group goals (Odumeru et al., 2013). The research under this concept investigates the link between transformational leadership and various positive outcomes such as: employee job satisfaction (Puni, Mohammed & Asamoah, 2018), organizational commitment (Jain & Duggal, 2018), employee engagement (Lee Idris & Tuckey 2019), employees' competency with organizational performance (Bin Attan & Mahmood, 2019), and many other factors. Ethical leadership understood as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making” (Brown et al., 2005, p. 120) arose as a result of increasing number of ethical scandals arising from organizations (Gerpott, 2019). Many studies explore the mechanism of influencing ethical leadership on followers' organizational behaviors (Gerpott, 2019; Javed, Khandai, Shahid & Tayyeb, 2018). Authentic leadership is also the promotion of a positive ethical climate with “internalised moral perspective” (Walumbwa et al., 2008, p. 94). Although, the academic literature on authentic leadership explores many problems in the enactment of authenticity, there is a lack of justification of its desirability (Iszat-White, Whittle, Gadelshina & Mueller, 2018). Spiritual leadership is the next emerging topic of leadership, with much research demonstrating the need for spirituality in the workplace (Fry, 2003; Phipps, 2012; Reave, 2005; Boorum, 2009, Riaz, 2012).

The above main theories have been described chronologically, which does not mean that the next theory completely replaced the previous ones. Successively emerging theories rather complement these previous theories and try to integrate different approaches. For example, research by Harris (2018) in which the author examined George Washington's approach to leadership according to the Great Man Theory, and Washington's leadership traits and skills according to Trait and Behavioral Theory. It seems that all theories are still continuing and are interwoven. New traits, behaviors, styles of leaders and contextual factors that make the leader more effective in managing today's organizations are constantly being sought. However, it seems that today leadership, which is a process in which a leader and his followers influence each other, has become contemporary paradigm (van Saane, 2019). This development in leadership theories and concepts is crucial for debating on research topics in leadership.

Methods

Research Methodology

To achieve the aim of the current study, a bibliometric analysis was conducted. The search for papers was conducted on the 22nd of July 2019 on Thomson Reuters' Web of Science, which has a large database of academic texts. To address the research questions, a list of keywords within the search titles in the category of Management were used. The searched keywords were "leadership" OR "leader" in order to contain all research themes under the topic of leadership. As a result, 12,235 publications from the year 1923 (when the first article was recorded in Web of Science database) to the present year 2019 were identified and were included in the final bibliometric analysis. The bibliometric analysis included: trend analysis, cluster analysis and word frequency analysis.

Trend analysis allows for the presentation of the main trends and changes in publications of leadership. The identification of the number of publications considering the year of publication and the most popular journals related to

leadership as well as the identification of the countries with the largest number of publications were conducted.

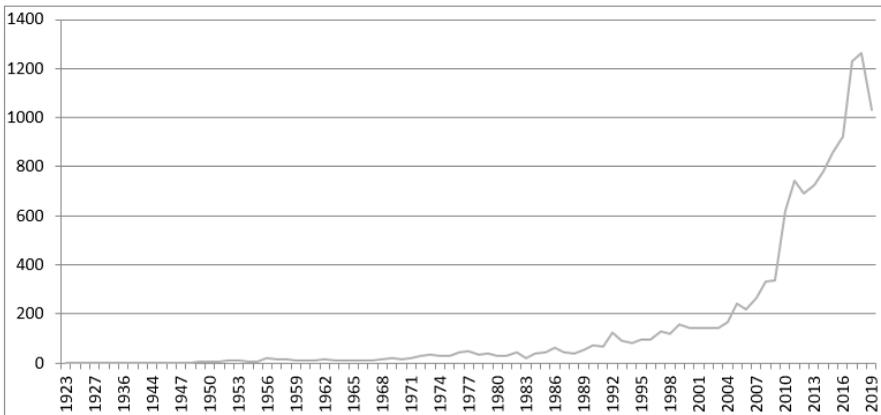
For cluster analysis, the VOSviewer method was used. VOSviewer is a method for a quantitative analysis of textual data and for constructing and viewing bibliometric maps (van Eck et al., 2010). The VOSviewer software helped to combine the analysed set of data into clusters, which allowed for the identification of the main areas of research. In this case, network visualization was created. The items were represented by their label and by default also by a circle. The size of the label and the circle of an item is determined by the weight of the item. The higher the weight of an item, the larger the label and the circle of the item; and the smaller the distance, the stronger relation. The cluster analysis was conducted in three periods in order to identify the changes in undertaken research topics. The first period was between 1923 and 1989. In this period of 3 keywords, 3 met the threshold in which 1 occurrence of a keyword was found. Due to the small number of keywords, the result of cluster analysis was insufficient. Thus, for these publications, word frequency analysis was performed. Word frequency analysis allows for indication of the research topics undertaken in leadership. Frequency analysis was made due to keywords that do not only facilitate finding the article in databases, but also reflect its specificity. The Wordle program (www.wordle.net) was used for this purpose. The word frequency analysis was presented in the form of a cloud, where the font size and thickness indicates the frequency of words. The word frequency analysis was performed based on publications' titles (because of the lack of keywords) using the "www.wordle.net" tool. For example, the title of the first article is 'A theory of industrial conduct and leadership'. Preposition and conjunction were removed from the title and only the words such as "theory", "industrial conduct" and "leadership" were taken. This procedure used for each single title of 133 publications from 1923 to 1960. In total, from 1923-1989, there are 967 publications, but the number of publications analyzed in that way was limited to 133. Firstly, because of the effort and time consumption of this procedure. Secondly, the results of previous publications are more interesting. Publications from the 80s are similar to those from the 90s and it would not be possible to observe differences in the topics discussed.

The second period was from 1990-2009, and the number of keywords was 4,101; 139 of them met the threshold with 15 minimum number of occurrences of a keyword, and with 6 minimum strength. The last period was 2010-2019 with 13,452 keywords, of which 554 met the threshold with 15 minimum number of occurrences of a keyword, and 6 minimum strength. Selection of minimum occurrences of a keyword was related to keeping the same number of occurrences in the studied periods and the visualization of map clarity and transparency of clusters. Furthermore, selection of these three periods was dictated by an attempt to present the difference between the periods. This period cannot be too long or too short. Although the first period is quite long (67 years) the number of publications is small. It means that if the author took a shorter period, the cluster analysis would not be possible because of the number of data. Moreover the 90s are characterized by a huge increase in academic publications. Thus, the analysis of the first publications would be devoured mainly by publication from 90s. In order to indicate the current topics of leadership, the last 10 years (2010-2019) seem very good.

Results

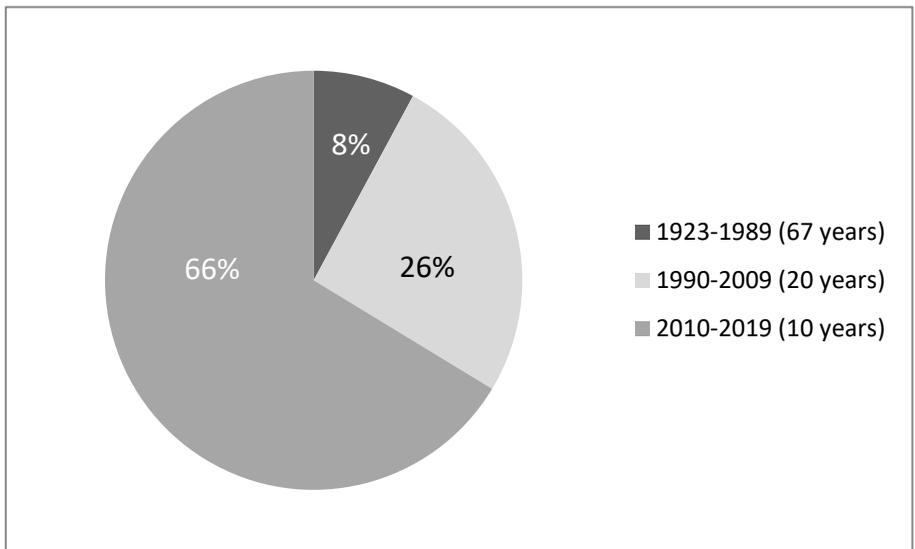
The number of the publications by year

In total, 12,235 articles were analyzed. The first article on leadership was recorded in 1923 on the Web of Science database. Since then, the number of leadership articles have steadily increased, as shown in Figure 1. In total, 967 publications were published in 1923-1989, which is less than 8% of all publications. The 1990s were a period of intense growth of new publications. In the period 1990–2009, 3,152 publications were published, which is over three times more than in the last almost 70 years. From 2010 to 2019, 8,116 publications have been published, which is 66% of all publications (Fig. 2).



Source: based on Web of Science [22.07.2019]

Figure. 1. Publications per year from 1923 to 2019



Source: based on Web of Science [22.07.2019]

Figure. 2. Publications per analyzed period from 1923 to 2019

The number of the publications by journal

A significant part of the publications that appeared in the years 1923-2019 are articles (66%). Other publications are book chapters (16%), proceedings papers (12%), books (1,5%) and other publications (4,5%) including book reviews, editorial materials, reviews, notes, reprints. The analyzed publications appeared in 98 different journals, books, conference materials and other publications. Below there are journals in which a minimum of 100 articles were published (Tab. 1). First place in the number of published articles (1044 articles) is Leadership Quarterly, published by Elsevier. Second place (386) - Personnel Psychology published by Wiley, and third (380) – Leadership by Sage.

Table 1. *The list of most numerous publications per journal*

No	Publications/Journals (Publisher)	Number of publications	Percent
1	Leadership Quarterly (Elsevier)	1 044	8.5%
2	Personnel Psychology (Wiley)	386	3.2%
3	Leadership (Sage)	380	3.1%
4	Journal of Applied Psychology (APA)	350	2.9%
5	Leadership Organization Development Journal (Emerald)	347	2.8%
6	Harvard Business Review (Harvard Business Publishing)	345	2.8%
7	Journal of Nursing Management (Wiley)	248	2.0%
8	Academy of Management Journal (AMJ)	178	1.5%
9	Journal of Leadership Studies (Wiley)	177	1.4%
10	Human Relations (Sage)	174	1.4%
11	Organizational Dynamics (Elsevier)	162	1.3%
12	Journal of Organizational Behavior (Wiley)	132	1.1%
13	Journal of Leadership Organizational Studies (Sage)	128	1.0%
14	New Horizons in Leadership Studies (Edward Elgar Publishing)	127	1.0%
15	Human Resource Management (Wiley)	109	0.9%
16	Journal of Management (Sage)	107	0.9%
17	Procedia Social and Behavioral Sciences (Elsevier)	106	0.9%
18	Research Technology Management (Taylor & Francis)	103	0.8%
19	Proceedings of The International Conference on Management Leadership and Governance	102	0.8%

Source: based on Web of Science [22.07.2019]

The number of the publications by country

Unsurprisingly in the context of previous results, the most publications are from the United States (published by Wiley, SAGE Publisher, Harvard Business Publishing, AMJ); next from England (by Emerald Publisher, Edward Elgar Publishing, Taylor & Francis). Just over half (52.5%) of all publications come from these two countries. China, Australia and Canada as well as two European countries: Netherlands and Germany have a significant contribution to the number of publications. In total, in these seven countries produced 75% of the publications. Table 3 shows only those countries where the number of publications was more than 100. Publications from these 25 countries indicated account for 97% of all publications.

Table 2. *Publications per country*

No	Country	Number of publications	Percentage
1	USA	5 212	42.6%
2	England	1 211	9.9%
3	China	771	6.3%
4	Australia	690	5.6%
5	Canada	550	4.5%
6	Netherlands	397	3.3%
7	Germany	368	3.0%
8	Sweden	216	1.8%
9	Turkey	187	1.5%
10	France	179	1.5%
11	Taiwan	178	1.4%
12	South Africa	175	1.4%
13	India	174	1.4%
14	New Zealand	161	1.3%
15	Israel	153	1.2%
16	Switzerland	150	1.2%
17	Norway	147	1.2%
18	Spain	141	1.2%
19	Romania	138	1.1%
20	South Korea	138	1.1%
21	Finland	123	1.0%
22	Malaysia	116	0.9%
23	Singapore	108	0.9%
24	Denmark	104	0.9%
25	Italy	101	0.8%
26	other countries/regions	350	2.9%

Source: based on Web of Science [22.07.2019]

The research topics of leadership

According to previous assumption the analysis of research themes of leadership was divided into three periods. The first period is from 1923 to 1989. The cluster analysis pointed out the existence of two unrelated clusters (Fig. 3). The first cluster is: behavior with group syntality, whose intensity can be observed in the second half of the 1950s (based on VOSviewer overlay visualization). The second cluster is industrial empathy, which was developed earlier. However, it should be noticed that this analysis is determined by a few keywords. Thus, the words frequency analysis was conducted. The analysis shows that the most frequency word is “leadership” or “leaders”, less – “group”, “business”, “management”, “study”, “training”, “personality”, “industry”, which can means that the research topics were rather general (Fig. 4). Other words are almost invisible, which means that these topics are addressed by single articles. In previous studies of this period the term of leadership was related to industrial organization, then to business. Many studies also focus on group and executive management as well as personality, attitudes, relation, behavior. In these studies appear word “patterns” which can mean that authors were searching the pattern of leadership.



Figure 3. Network visualization of leadership publications between 1923-1989

Publications analysis was conducted from 2010-2019 in order to determine the current trends in research of leadership (Fig. 6). Due to the amount of publications during this period and a number of keywords, a large number of thematic threads was noticed. However, similar clusters can be distinguished. Instead of one leadership performance cluster, there are two: *leadership management* (green) with 186 items and *performance leadership* (pink) with 79 items. *Leadership management* cluster focuses on such items as: leadership development, competence, knowledge, education and power, values and identity. Completely new terms with very little size of circle has appeared in this cluster like academic leadership, collective leadership, distributed leadership, inclusive leadership, instructional leadership, rational leadership, responsible leadership, and spiritual leadership. *Performance leadership* cluster focuses on innovation, creativity, competitive advantage and firm performance like in the previous studies. Another cluster that is still under development is *transformational leadership* (yellow) with 154 items. In addition to the previously mentioned items, there are clearly new thematic threads such as: authentic leadership, empowering leadership, ethical leadership, participative leadership, paternalistic leadership, servant leadership, as well as psychological aspects such as: psychological capital, psychological climate, psychological condition, psychological contract, psychological empowerment and psychological safety. It seems that it is difficult to escape from psychological aspects by taking up topics that are related to leadership. Also, topics within the two previously mentioned clusters, *leader personality* and *leader behavior*, are also developed as *leader personality and behavior* cluster (orange) with 94 items. A thread of emotions was extended with items such as: emotion, emotion regulation, emotional intelligence, emotional labour and positive emotion. The next cluster - *teamwork* (violet) is clearly a newly discussed area during this period. This cluster is associated with 38 items, such as: team effectiveness, team leadership, team performance, teamwork, virtual teams, work group diversity, collective-efficacy, group-performance, shared leadership, self-leadership, emergent leadership. The analysis indicated one more cluster (black) with 3 items: delegation, employee and leadership behavior, which is difficult to name and classified as a thematic area. Rather, it contains words that have not been combined with others.

Topic 1 - Leadership management

This is the main and constantly developed direction of research in the field of leadership. However, only the threads undertaken in this topic have changed - from the theoretical leadership concept, through innovation and development, to new 'forms' of leadership such as: instructional leadership, inclusive leadership, or spiritual leadership. It is expected that these research topics will be further developed.

Topic 2 - Leadership performance

Leadership performance is the next topic undertaken broadly in the last 30 years. In the previous period, it has no transparent structure. It has appeared quite often, however, it was connected to many other topics. Recently, as the main research topic is primarily undertaken in the context of creating innovation, competitive advantage or organizational performance. It is difficult to notice new themes here.

Topic 3 - Leadership model

The construction of various models in leadership is next research theme. First of all, the links between many variables using different predictors like satisfaction, commitment, trust were examined. In the 90s, leadership models were strongly exposed as a separate cluster. Nowadays, it has been "swallowed up" by other clusters.

Topic 4 – Leaders' behavior

This topic is constantly being taken up in the context of leadership from the first publications to the last ones. However, in the 90s, it was used in the context of diversity, primarily on a gender while currently, it is closely related to personality.

Topic 5 – Leaders' personality

Among the dominant themes under personality, leaders-followers theories such as transformational leadership, transactional leadership and participative leadership can be distinguished. These topics are so strong that they are now

creating a separate cluster that is still dynamically developed. Many psychological issues appear also here.

Topic 6 - *Team leadership*

This is a newly created cluster in which issues of leadership in a group (a traditional and a virtual team) are discussed, as well as the efficiency and diversity of the team.

Conclusion

The analysis of publications in leadership indicates unflagging interest in this theme. The concept of leadership is undertaken in various disciplines of management, as indicated by the titles of journals that dealt with this topic - from organizational behavior, through business, human resources and technology management, to psychology. However, it can be clearly seen that research trends are actually imposed by two countries: US and England. While, the topic of leadership is being tackled around the world, the level of economic development, scientific development, business management, including approach to people management and leadership can be different in different countries and regions of the world. This matters in the context of leadership education programs which should take into account these differences. What is an obvious practice in the US can be a fledgling concept in another country. This is particularly important to pay attention to research from other countries in order to allow access to various concepts and theories.

The bibliometric analysis of leadership publications allows for the drawing of some conclusions. Firstly, the subjects of leadership taken by researchers oscillate around the main leadership theories: trait theory, behavioral theory, contingency theory, leadership and followers, and leadership as a process. However, these theories seem to "stretch" under the influence of the variety of research threads undertaken within them. Secondly, the research threads can become a separate thematic area (cluster) at some time point. This means that new leadership concepts are still emerging. Thirdly, it is noticed that there are many connections between research threads. The bibliometric analysis

indicated that each threads are associated with an increasing number of the remaining other threads, even outside of the cluster. For example, performance is associated with distributed leadership (leadership management cluster), gender (leader personality and behavior cluster), job satisfaction (transformational leadership cluster) and shared leadership (teamwork cluster). This indicates that more and more research is searching the links between each single leadership threads. On the one hand, this shows the need to integrate various theories, approaches, concepts and factors and the blurring of their separateness. On the other hand, many empirical analysis on the moderating and mediating variables can cause chaos in the state of knowledge. In practice, leaders can not know where to focus their attention. It is worth it to consider whether we want to go in the direction of extended models investigating mechanisms between small variables. Fourthly, the analysis showed a weakening interest in 'hard' aspects of leadership in a 'soft' and psychological direction. It seems that these threads will be further developed. Fifthly, the development of leadership theories moved the leader from principal place (according to the Great Man Theory) to the background (according to theories such as: leadership and followers, leadership as a process). Meanwhile, the followers were put in the central place in a way that the followers became influential followers. This means that leadership is not a leader with strong and dominant position in organization, but rather a leader is one who in fact is a “great man”, not because of supernatural traits, skills and behavior, but because of his/her approach to followers through “human” traits, skills and behavior.

The conclusions show several directions for leadership education programs. Leadership education should focus on the main theories that are still significant for development of leadership skills and abilities. This should also include ‘soft’ issues of leadership. The leadership education has long revolved around knowledge competencies, such as planning, finance, investment, and project management in order to prepare good managers for organizations. However, this study shows that psychological leadership issues are gaining importance. Moreover, a large number of leadership topics indicates the need for integration of them in order to incorporate many aspects in leadership education programs.

This study has certain limitations. One limitation is that the analysis is based on quantitative keyword analysis. As a further direction of research, it would be worth it to conduct a qualitative analysis of publications by the content analysis to confirm the results. The number of clusters may seem to be another limitation. However, the author tried several times before choosing this one and for each option the results were the same or very similar in the context of main cluster.

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