Bibliometric analysis of studies on "ethical leadership and sustainability" using a visual mapping technique

''Etik liderlik ve sürdürülebilirlik'' kavramlarını ele alan çalışmaların görsel haritalama tekniği kullanılarak bibliyometrik analizi

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Abstract

This study aims to examine the academic studies in the literature where the concepts of "ethical leadership" and "sustainability" come together and to bibliometric analyze the scientific publications on this subject with the visual mapping technique. Ethical leadership and sustainability are of increasing importance in today's business world. This study uses bibliometric methods to understand better the connections and development of these two concepts in the literature. The scientific data used as the basis of the study was selected from the Web of Science (WOS) database. As a result of the search in Web of Sciences, 205 publications were reached, and it was seen that most of these publications were made in "2021" in the "article" type, in the "Environmental Sciences" category, in the "business economics" research area. Research data analyses were visualized with the VOS viewer program, and these analyses are presented as visual maps in the findings section.

Keywords: Ethical Leadership, Sustainability, Vos viewer, Bibliometric Analyze

Jel Codes: M14, M21, M29

Öz

Çalışma, "etik liderlik" ve "sürdürülebilirlik" kavramlarının bir araya geldiği alan yazındaki akademik çalışmaları incelemeyi ve bu konudaki bilimsel yayınları görsel haritalama tekniğiyle bibliyometrik olarak analiz etmeyi amaçlamaktadır. Günümüz iş dünyasında etik liderlik ve sürdürülebilirlik kavramlarının önemi artmaktadır. Bu nedenle bu çalışma bu iki kavramın bağlantılarını ve gelişimini daha derinlemesine anlamak için bibliyometri yöntemlerini kullanarak yapılmıştır. Çalışmada kullanılan bilimsel veriler Web of Science (WOS) veri tabanından seçilmiştir. Web of Sciences'ta yapılan tarama sonucunda 205 adet yayına ulaşılmış, bu yayınların en çok "2021" yılında, "makale" türünde, "Çevre Bilimi" kategorisinde, araştırma alanı olarak ise "işletme ekonomisi" alanında yapılmış olduğu görülmüştür. Araştırma veri analizleri VOSviewer programı ile görselleştirilmiştir ve bu analizler görsel haritalar halinde bulgular bölümünde sunulmuştur.

Anahtar Kelimeler: Etik Liderlik, Sürdürülebilirlik, Vosviewer, Bibliometrik Analiz

JEL Kodları: M14, M21, M29

Introduction

Recently, an issue of great concern among management scholars and practitioners is the decisive role of leadership in the existence or non-existence of organizations, whether private or public, for-profit or not-for-profit. Ethical leadership is gaining importance as a catalyst for organizations aiming to create a sustainable environment (Den Hartog, 2015). At the same time, identifying stakeholders and thoroughly assessing the impact of every decision is the foundation of ethical leadership (Mihelic, Lipicnik, & Tekavcic, 2010). With the principle of being fair and considerate of others, awareness of the consequences of actions enables ethical leadership to adhere to broad standards of moral action (Ogaga, Ezenwakwelu, Isichei & Olabosinde, 2023). Operating in line with ethical principles plays a critical role in achieving sustainability goals, ensuring a focus on long-term success in economic, environmental and social dimensions (Hitt et al., 2005). The deep relationship between these concepts requires a harmonious combination of ethical values and sustainability efforts in the business world. Businesses need to create specific processes to implement business ethics practices effectively. These processes include creating an organizational culture and climate, developing an ethical leadership approach, determining ethical principles, creating the necessary organizational structure and human resources, and establishing an ethical audit system (Wilson, 2018; Dey, Bhattacharjee, Mahmood, Uddin, & Biswas (2022); Toor & Ofori, 2009). In businesses, organizational culture refers to shared common values, and organizational climate refers to the psychological environment of the business based on behaviours (Schneider, Ehrhart & Macey,2013). Businesses must create an organizational culture and climate suitable for business ethics. Ethical organizational culture and climate significantly impact the realization of the goals and objectives of the business in a sustainable manner. It is seen that businesses with business ethics practices are businesses that interact and communicate with the internal and external environment, are fair to society, and carry out their activities with an understanding of social responsibility (Düger, 2021). Businesses need to understand ethical leadership in their transition to business ethics practices. Ethical leadership means that leaders motivate employees in line with organizational goals and objectives according to ethical principles (Arslantaş & Dursun, 2008: 111).

Unlike traditional management approaches, the general feature of modern management approaches is that they consider the organization a multidimensional system that must adapt to its environment. In this multidimensional system, the relationships between the leader and his/her followers constitute the driving force in achieving organizational goals, and the organizational climate created by these relationships is important for sustainable success (Tüyen, 2020). In addition, to achieve sustainable success, today's businesses need to focus on sustainable economic performance and environmental and social problems (Ayral & Saracel, 2021).

As can be seen from the above explanations, while ethical leadership affects the organisation's success, sustainability-oriented goals are important in the new world order. It is predicted that ethical leadership and sustainability practices will bring lasting success in this new world order. In this context, this study aims to examine the connections and development of the concepts of ethical leadership and sustainability in the literature by using bibliometric analysis methods to understand them in more depth. In addition, by focusing on the intersections between ethical leadership and sustainability, this research aims to provide recommendations to businesses and policymakers, to guide the increase in national and international research, and to guide researchers who want to work in this field.

Literature review

Leaders shape the business's organisational structure with their vision and values, guide employees and serve as role models. The approaches leaders exhibit affect the decisions taken, the use of power, the organization, and the employees. Leaders have a significant impact on shaping the attitudes and behaviours of employees. In addition, leaders have an important role in creating an organizational culture that can share and flow the information that employees have and integrate this information into organizational decision-making processes (Düger, 2021). Therefore, a leadership behaviour that treats all employees equally and adopts universal values such as honesty, justice and impartiality will significantly contribute to employees' positive attitudes and behaviours. Ethical leadership is based on employee empowerment. Ethical leadership includes ethical and fair behaviour, openness, honesty, being unbiased and impartial, and being a role model (Arslantaş & Dursun, 2008: 111). Ethical leadership stands out because it focuses more on moral and ethical values than other leadership styles (charismatic, transformational, authentic, servant leadership, etc.) (Fry & Kriger, 2009: 1678).

Today, sustainability is a broad concept that attempts to integrate environmental, human, social, political, and economic dilemmas into an analysis compatible with the global society and political economy of the 21st century. Sustainability, which includes environmental and social concerns and

economic prosperity, refers to keeping all long-term interests between humans and nature in a stable balance (Garvare & Johansson, 2010). In addition, sustainability is a concept related to ethics, restructuring, social responsibility, and competition (Pelinescu and Radulescu, 2011). It involves acting without violating ethical rules and considering social and environmental interests in action or activity decisions, while on the other hand, it has a strategic nature for competition. On the other hand, ethical behaviours have a positive effect on increasing employees' belief that they work well in the work environment and on adopting the business. It is necessary to realize that ethical rules have an important place in business life, to provide an environment of trust in management and to create an ethical climate. The implementation of leadership approaches based on ethics in businesses and the formation of an ethical environment is important for the sustainability of businesses. Ethically successful management styles may be needed for businesses to manage with the best performance. There is a close relationship between the management style of businesses and the formation of an ethical environment. It is known that the ethical environment in the business plays a major role in the ethical relations between people that occur in businesses. Leaders strive to create an ethical environment and have ethical values to realize business activities. Leaders make making decisions that will contribute to the ethical environment easier by morally evaluating business events and situations. Businesses create ethical business environments in the best way by developing the ethical leadership of their managers. People must adopt ethical leadership roles by following the rules of the ethical environment (Günel, Civelek, & Karabulut, 2016).

Eisenbeiss (2012) examined the explanation of ethical leadership in terms of religion and stated that there are four basic normative principles. These are humanistic orientation, justice orientation, responsibility and sustainability orientation and moderation orientation.

In Zincir & Tunç's (2018) study, ethical leadership is discussed in terms of its dimensions: human orientation, sustainability and ethical guidance, role clarity, and honesty. The research on 175 white-collar employees revealed that employees perceive whether their managers are ethical. When the results of the study are evaluated in terms of the components of ethical leadership, it is observed that the lowest average belongs to sustainability and ethical guidance. This finding may suggest that ethical and ethically inclined leaders have their weakest points in guidance. Even though leaders resolve ethical dilemmas, it is noted that leaders cannot relatively be environmentally conscious and share their experiences related to them with their followers. It can be speculated that the leader's mentorship aspect, not only ethical, has yet to mature. (Zincir & Tunç, 2018). In Brown et al. (2005), the perception of ethical leadership is that ethical leaders measure success not only by results but also by their methods, make fair decisions, are reliable, and act by prioritizing the interests of employees. Kalshoven, Den Hartog, and De Hoogh (2011) developed a measurement tool to define ethical leadership in the workplace. This tool shows that ethical leaders focus on people, justice, sustainability, and integrity. It also emphasizes that they are open to sharing power and providing clear ethical guidance. A model of sustainable leadership proposed by Tideman, Arts, and Zandee (2013) includes transformational qualities, including leadership of context, mindfulness, continuity, creativity, and collectivity. Transformational, spiritual, ethical, and situational leadership can contribute to developing environmental sustainability programs, while environmental leadership can support sustainability by combining it with personal values.

Based on the conceptual framework, this study aims to provide general information about the network structures of the relevant works by scanning publications in the international literature related to ethical leadership and sustainability to enable monitoring of future developments and changes in the field and to shed light on future studies to spread awareness of sustainability in ethical leadership.

Methodology

Research objectives

The study aims to examine the publications that bring together the concepts of "Ethical leadership" and "Sustainability" in all fields without the restriction of "year" in the WOS database by performing bibliometric analysis with a VOS viewer visual mapping technique.

In line with this purpose, the following questions were sought to be answered.

1)What is the distribution of publications that bring together the concepts of "Ethical leadership" and "Sustainability" in all fields without time constraints, Web of Sciences Categories, Document Types and Research Areas?

2)How are the bibliometric maps of Co-authorship of Authors, Citation of authors, Citation of Countries, Citation of Organizations, Co-occurrence of Author Keywords, and Co-citation of Co-authors bibliometric maps of publications that combine the concepts of "Ethical leadership" and "Sustainability" in all fields without time constraints?

Method

This study used the bibliometric analysis method, one of the qualitative research methods, to examine the studies published on "ethical leadership" and "sustainability" in internationally recognized databases. Bibliometrics is the numerical analysis of bibliography features in a subject. Bibliometric analysis aims to numerically evaluate the relationships between publications on a science or subject. Therefore, the bibliometric analysis method includes the analysis of all the sources (articles, books, and all related documents) and statistics available in the literature in order to determine the nature and development process of a discipline as a result of combining, interpreting and analyzing statistics (Lawani, 1981). The findings of bibliometric analysis related to the concepts of "ethical leadership" and "sustainability" mathematically and statistically shed light on the formation and development process of literary studies on related topics to be conducted by researchers (Pritchard, 1969). In addition, "ethical leadership" and "sustainability" are among the important issues in management and are frequently addressed in academic research. Therefore, a case study used bibliometric parameters to examine these concepts. A case study is a methodology that uses various data collection methods to gather in-depth information about a system (Chmiliar, 2010). Within the scope of the study, publications available in the Web of Science database were evaluated to collect data. This database was chosen because it is one of the most preferred databases by researchers worldwide. After determining the topic of the study as "ethical leadership" and "sustainability", the following steps were followed. First, Web of Science was selected as the database, and then "ethical leadership" and "sustainability" were searched in WOS in all fields without any year restriction. As a result, 205 publications were found. Then, information mapping was performed with the VOS viewer program, and the data were evaluated. VOS viewer can create networks between journals, publication networks, researchers, countries, organizations, and keywords in the scientific field (Li, Mao, Ouyang & Zheng, 2022). The data search for the bibliometric analysis of the studies dealing with "ethical leadership" and "sustainability" was conducted on November 19, 2023. The study's biggest limitation is that it is limited to the WOS database and only the English language.

Data analysis

The research findings were analyzed using bibliometrics with a descriptive analysis technique. In addition, network maps were created with the help of the VOS viewer program, one of the software developed for bibliometric purposes, and a bibliometric mapping program.

Expected contributions

This research will provide a visual overview of ethical leadership and sustainability literature and reveal potential gaps that can guide research in this field. Furthermore, this study will help researchers to explore new opportunities for further research in these areas.

Findings

Analysis of publications on ethical leadership and sustainability in international literature

In the international literature, 205 publications were found in the Web of Science database following the SCI, SSCI and AHCI criteria in the subject tab, where the words ethical leadership and sustainability are included together. The following distribution was obtained when the Web of Sciences categories were analyzed.
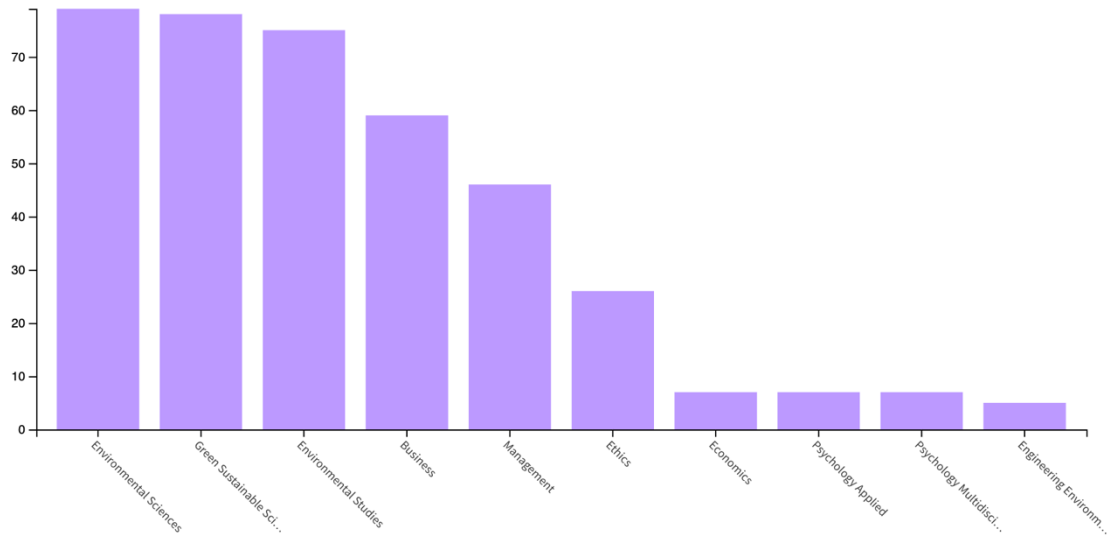
Figure 1: Web of Sciences Categories

As can be seen from the figure above, according to WOS, publications dealing with the concepts of "ethical leadership" and "sustainability" together are mostly published in Environmental Sciences (79 publications) and Green Sustainable Sciences categories.

When we look at the distribution of the publications scanned in Wos that address the concepts of "ethical leadership" and "sustainability" together according to years, it is seen that most of the publications were published in 2021 (31 publications).
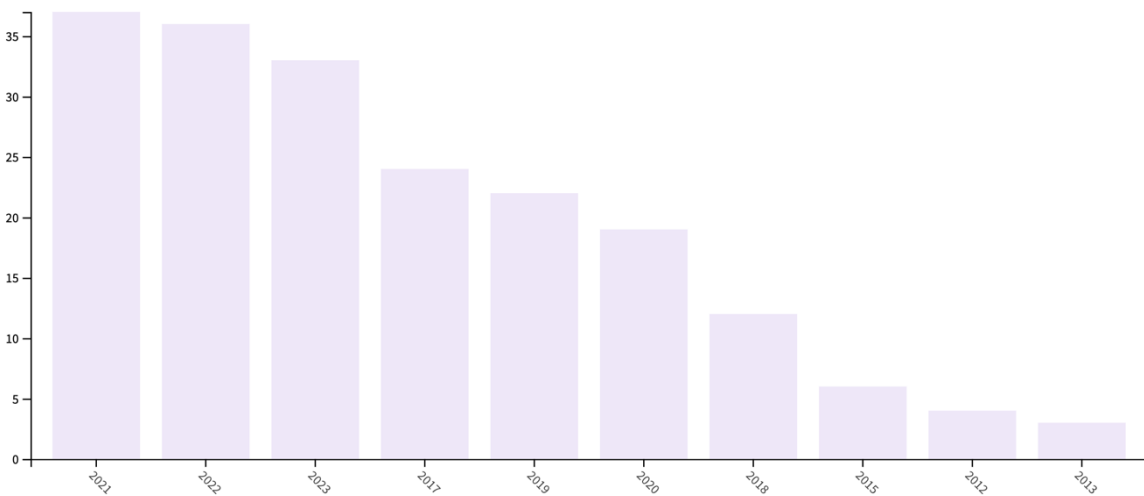
Figure 2: Distribution of Publications by Year

It is thought that the first study published in the Web of Science that deals with ethical leadership and sustainability issues was published in 2012 because the concept of ethical leadership is a new type of leadership.

The chart below shows the distribution when the countries publishing on ethical leadership and sustainability concepts are examined.
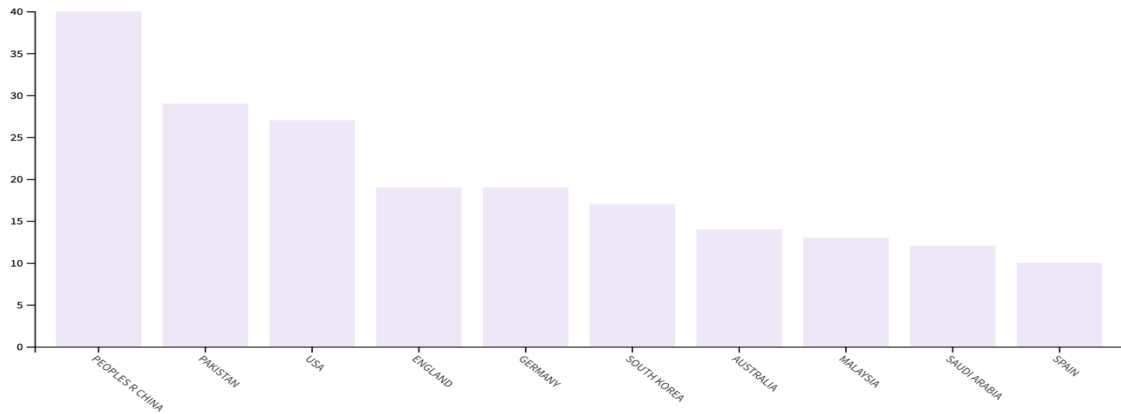
Figure 3: Distribution of Publications by Country Web of Sciences Document Types

As shown in Figure 3, China, Pakistan and the USA are the leading countries publishing on related concepts.

Figure 4 shows the number of works included in the study according to their types. According to WOS, when the document types of the publications dealing with the concepts of "ethical leadership" and "sustainability" together are analyzed, it is seen that most of the publications are of "article" types. 165 articles, 23 review articles and 21 book chapters are included in the research.
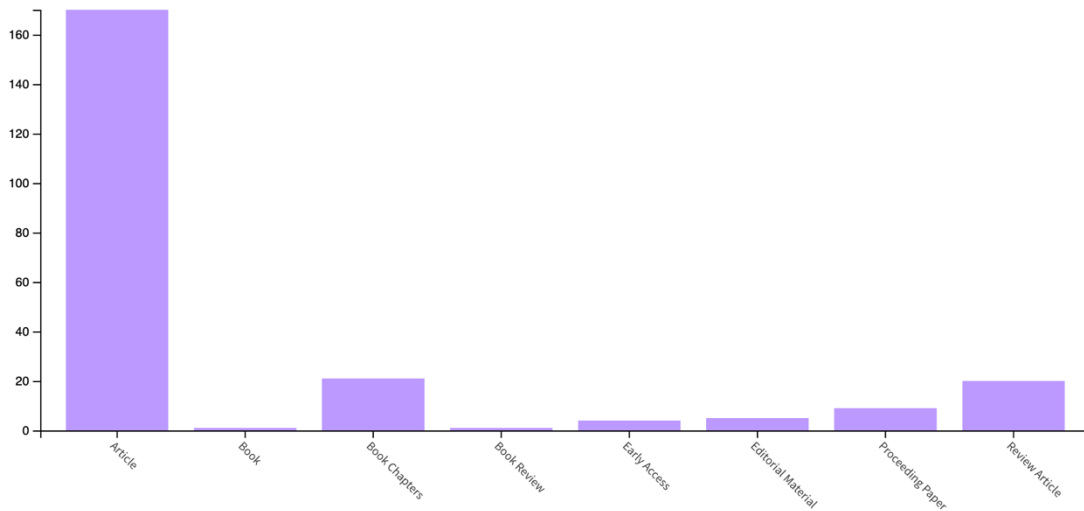
Figure 4: Distribution of the Types of Publications

Thus, according to WOS, when the document types of publications dealing with the concepts of "ethical leadership" and "sustainability" together are analyzed, it is seen that most publications are made in "article" types.

When the Research Areas of the publications dealing with the concepts of "ethical leadership" and "sustainability" together are analyzed according to WOS, it is observed that most publications were made in the fields of "business economics (99 publications)" and "environmental sciences (87 publications)".
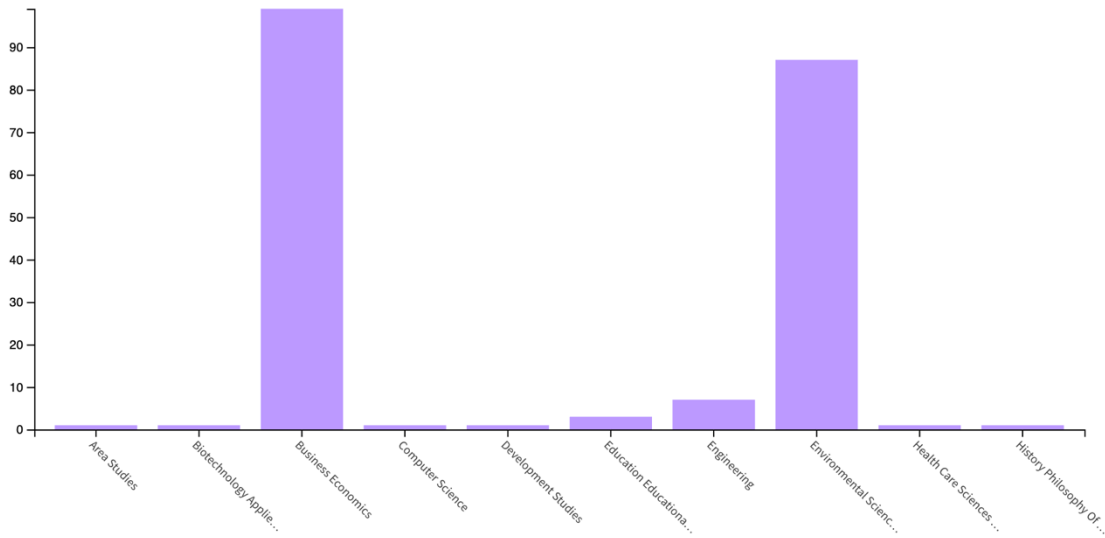
Figure 5: Web of Sciences Research Areas

According to the co-authorship analysis of the authors, a network map was created by determining at least one publication and at least 1 citation criteria to identify the most connected and collaborating authors. According to the analysis conducted among the names with the most connections, there are eight names and 16 connections in two clusters. The eight most connected authors in the cluster are shown in Figure 6 below. Asif Muhammad is the author with the highest connection strength (connection strength 7).
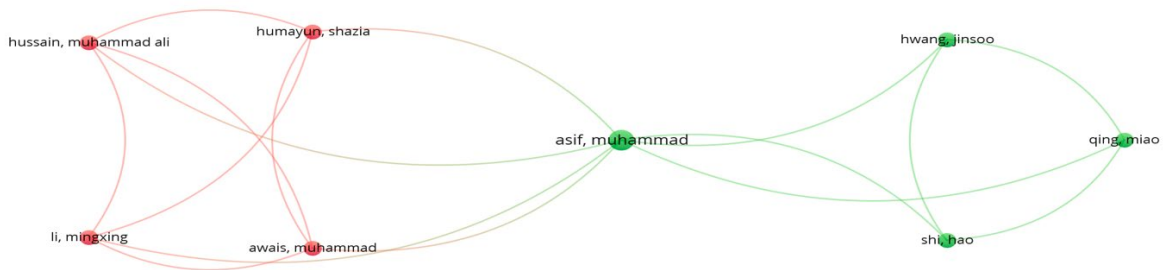

Figure 6: Co-authorship of Authors

A network map of author citation analysis with at least one publication and at least 1 citation criterion was created to determine the citation networks. In the analysis of the units seen to be connected, 61 clusters, 283 connections and a total connection strength of 285 were determined. The most cited authors were de Hoogh, Annebel H.B; Den Hartog, Deanne N.; Kalshoven, Karianne, with 351 citations. These three authors are also among the top three regarding total link strength.
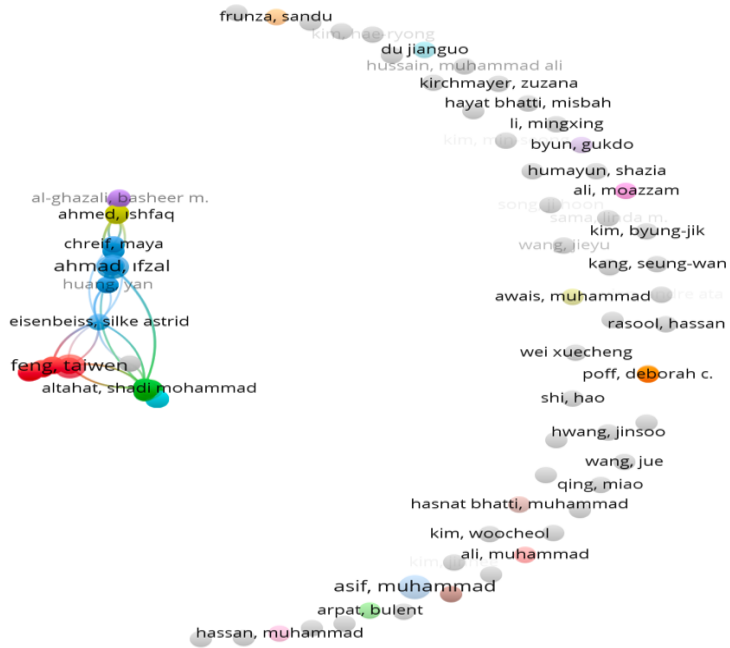
Figure 7: Citation of Authors

A network analysis was conducted based on the criteria of having at least one publication and receiving at least one citation from another country across 27 observed units to construct a citation network map according to the origin countries of publications. The analysis revealed 4 clusters, 43 connections, and a total link strength of 58. The countries receiving the highest number of citations were found to be the Netherlands (with 351 citations), Pakistan (with 337 citations), and Australia (with 115 citations), all of which also ranked in the top three in terms of total link strength. In terms of the number of publications, Pakistan (with 12 publications), the People's Republic of China (with 11 publications), and North Korea (with ten publications) ranked the highest.

Figure 8: Citation Analysis of Countries

A network analysis was conducted across 90 observed units to construct a citation network map regarding inter-institutional citations based on the criteria of having at least one publication and receiving at least one citation from another institution. The analysis revealed the highest number of cited publications originating from institutions such as the University of Amsterdam (with 351 citations), the University of Utrecht (with 351 citations), and the University of Munich (with 186 citations). A total of 10 clusters, 128 connections, and a total link strength of 130 were identified in the
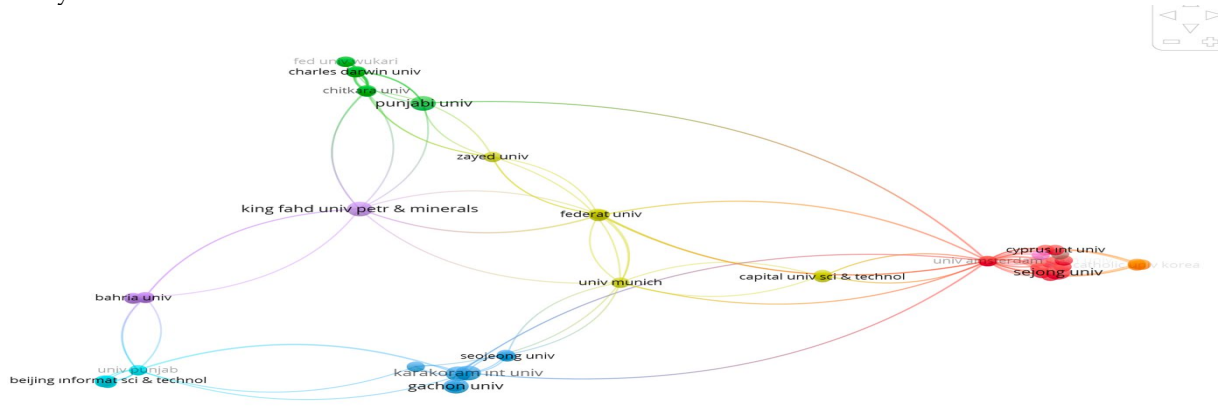
analysis.

Figure 9: Citation Analysis of Organizations

When we look at the most frequently used keywords in the publications related to "sustainability" and "ethical leadership", ethical leadership with 38 repetitions, sustainability with five repetitions, leadership with four repetitions, psychological safety and green human resource management with three repetitions. Regarding total link strength, the strongest expressions were ethical leadership and psychological safety. As a result of the analysis conducted with 194 observation units that were seen at least two times and had a relationship between them, a total of 4 clusters, 34 connections and 48 total connection strengths were determined.
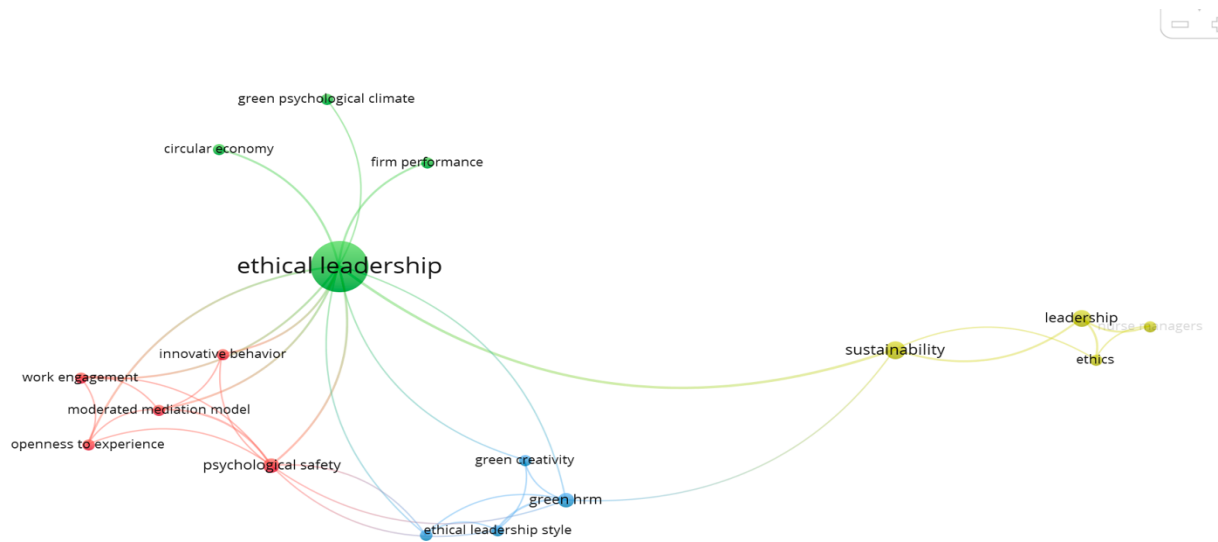

Figure 10: Keyword Analysis (Co-occurrence of Author Keywords)

Different sources cited in a publication are called co-citation. According to the analysis conducted on 2518 units, the number of citations by selecting a minimum of 10, 3 clusters, 298 links and 2980 total link strengths were identified.
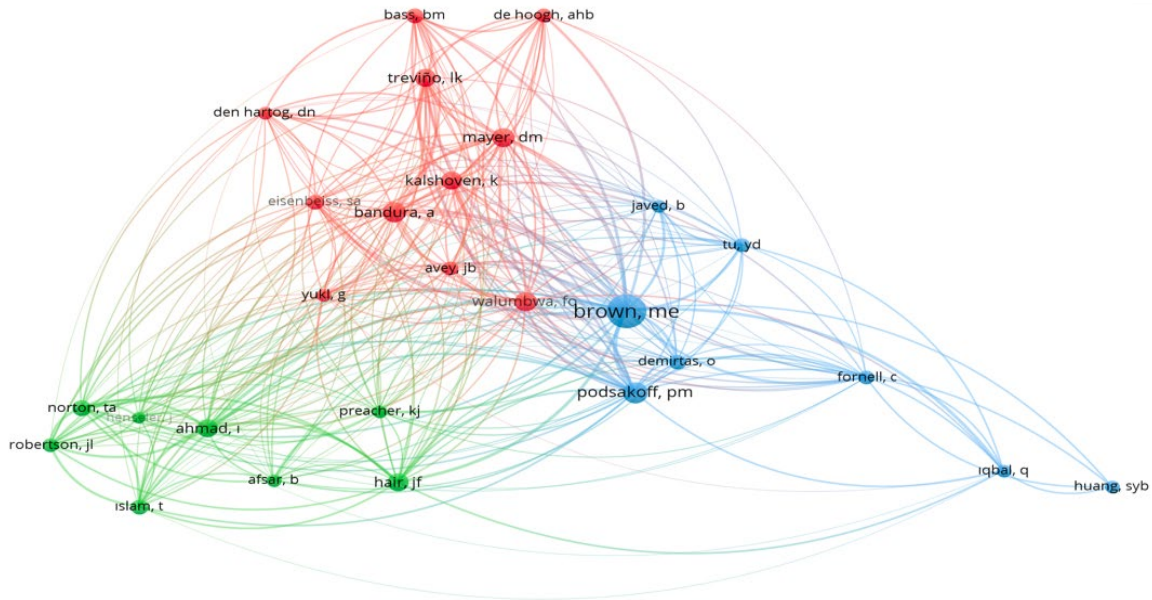
Figure 11: Co-citation of Co-authors

Figure 11 shows the authors with the highest number of co-citations: Brown Me (79) and Podsakoff Pm (32).

Discussion and conclusion

The study analysis provides a clear picture of the growth in "ethical leadership" and "sustainability" based on 205 relevant studies in the WOS database. Over the last decade, there has been an increasing number of studies addressing the concepts of "ethical leadership" and "sustainability", and researchers have recognized the importance of ethical leadership and its contribution to organizational sustainability. As a result of the search in WOS, among 205 publications, it was seen that these publications were mostly made in "2021" in the "article" type, in the "Environmental Sciences" category, in the "business economics" research area, and the most co-cited author was Brown Me (79).

The address institution of the most cited publications was the University Amsterdam (351 citations), and the most frequently used keywords were ethical leadership, sustainability and leadership. This result is not surprising considering the concepts in question. Although the most cited author is de Hoogh, with 351 citations, Asif Muhammad has the highest link strength among the authors. On the other hand, although the countries with the highest number of publications are China, Pakistan, and the USA, when the citation analysis of the countries is analyzed, it is seen that the Netherlands, Pakistan and Australia are the countries with the highest number of citations in "Ethical leadership" and "sustainability" research. The concepts of "ethical leadership" and "sustainability" will be on the agenda in the future as they are strategically important concepts for organizations to gain competitive advantage. Therefore, it is expected that the research results will guide researchers in future studies on this subject. Within the scope of the information found in the findings section, it is estimated that it can give researchers an idea of the topic of an article. It may also contribute to researchers who plan to go abroad from Turkey for scientific studies regarding country/researcher, etc. This study examined the studies published in WOS in which the concepts of "ethical leadership" and "sustainability" are used in English with the bibliometric analysis method without the year's restriction. In future studies, more detailed studies can be prepared for different periods by selecting different publication criteria (such as publication type and language criteria) for the concepts of "ethical leadership" and "sustainability" from different databases such as Scopus, Elsevier, and EBSCO. In addition, in this study, bibliometric analysis was performed using the Vos viewer program. For future studies, different analyses and visualizations can be made using different visualization programs (Sci2Tool, Cite space, etc.).

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