

Original Research

Recognizing Components of Sustainable Performance Management: An Illustration of Bibliometric Networks Based on Meta-Synthesis Approach

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Abstract

Managers strive for comprehensive, reliable, and flexible solutions to evaluate their organization's performance. Nonetheless, recognizing practical performance components has always remained relatively unanswered among managers and researchers. Accordingly, the present study aims to identify the elements influencing sustainable performance management processes considering research literature in the contingent field and eventually pinpointing potentially relevant elements. These elements would assist managers, specifically human resource managers, pursue their objectives. Researchers have already identified keywords related to the research topic by employing meta-word analysis and brainstorming methods with the help of Qiqqa software. Afterward, using VOSviewer, they extracted the vocabulary items of the co-occurrence network. This network and the hotspots identified hereafter established a solid foundation for meta-synthesis, taken as a meta-synthesis approach in this study. Then, four contingent keywords, including “sustainable development”, “sustainable development management”, “sustainable performance development”, and “sustainable performance management,” were considered to explore and analyze scholarly global databases such as Emerald, Proquest, SID, and Web of Science, as well as Google Scholar database and the dissertations defended by postgraduate students. Sources initially entering this research included 312 studies in full text, of which 80 were excluded due to lack of inclusion criteria. Eventually, the contents of the remaining 232 articles were surveyed. The number of overarching themes stands at one constructive theme, four primary themes, and seven, and the frequency of extracted codes hit 513. The findings of this research demonstrated that the components of innovation, technology, supply chain, organizational knowledge, economic, social, and environmental factors could cover all aspects of performance evaluation and would introduce a new literature called “Sustainable Performance Management” into the management field. The components of innovation, technology, supply chain, and organizational knowledge fail to be identified except through meta-synthesis and library analysis. This unprecedented aspect of the

present study makes it distinguishable from previous studies. Considering this article's findings, managers, researchers, and other related professionals will be able to conceptualize and comprehend performance management issues in an alternative way. Consequently, human resource managers could identify components related to the sustainability of organizational performance management and put them into research and practice.

Keywords: Performance Management, Sustainable Development, Sustainable Performance Development, Sustainable Development Management, Sustainable Performance Management, Meta-Synthesis Approach, Bibliometric.

Introduction

Performance management has relatively complicated dimensions in terms of conceptualization. Moreover, in Iranian sense and management literature, just a few articles and books have been published in the related field. Reviewing specialized books in this field, you will undoubtedly encounter this famous statement: "If someone can solve the problem of evaluation, he should receive the Nobel, Politicians and Hillman Prizes in one year" (Seyed Naghavi, Hassanpoor & Hesami, 2012). In reality, what distinguishes successful from unsuccessful enterprises is not the development of good plans; the excellent implementation of those plans is determining. At all levels, the implementation of programs depends upon individuals and their performance (Harbour, 2008). Performance management is considered among strategies for developing human resources and thus improving the productivity of human resources of any organization. It aims to strengthen the performance-oriented organizational space and create empathy among employees and managers and alignment between objectives.

Furthermore, the employees and objectives of the organization will surely improve organizational performance. Therefore, establishing a performance management system to achieve organizational goals will bring more productivity and profit to the organization (Armstrong, 2015). Organizational performance is regarded as the essence of an industrial enterprise. However, in terms of performance, it is crucial not only to achieve results but also to maintain and develop a company's potential (Gyurák, Stareček, Koltnerová & Cagánová, 2020). Performance management is one of the most significant recent developments in the human resource management of organizations. The term was first coined by Beer Verhoe in 1976. Although this concept resulted from the need for a consistent and integrated approach to performance-based management and reward, it was not considered a distinct approach until the mid-1980s. Since performance-based appraisal and payment systems were designed and implemented superficially and hastily, they failed to fulfill the requirements expected by the organization entirely. As a result, performance management resembles a phoenix among the traditional and partially invalid rating systems based on competency and goal-based management (Armstrong, 2015). According to Daniels (2014), performance management is a data-driven management system comprising three main elements: measurement, feedback, and positive reinforcement. The key to an organization's strategic success is the development and growth of its performance management system. That is because, as the saying goes, "something that can be measured can always be managed". "In the years to come, we are required to go beyond numbers and language to understand, evaluate, and calculate intangible resources such as learning, intellectual, social capital, principles and beliefs, and otherwise, stories," says De Hook, founder of Visa Network. What we say about the values and the prosperity of their tribes

will be increasingly wrong (Daniels, 2014).

One way to develop a profound understanding of evaluating performance in a particular area is to inquire about individuals directly involved. In most cases, we employ metrics on employees, while performance appraisal for strategic learning denotes that employees must believe in indicators and utilize them to make more informed decisions. Hence, the involvement of individuals (both domestic and foreign) is very crucial. The organization will operate more effectively in its environment when strategically improving performance. Consequently, it is significant to involve individuals (both internally and externally) (Marr, 2006). Hence, improving performance is an effective strategy if an organization intends to perform more effectively in its environment.

Nalarine and Larrai (2001) considered the realm of performance management to include the organization's overall strategy and, consequently, the human resource management strategy. Other factors, such as external evaluation, improvement, and development of information system management, individual and group evaluation systems, system rewards, behavior management systems, etc., account for a set of performance management strategies. Performance management improves organizational performance by communicating and modifying individuals, groups, and organizational goals. In addition, it is a tool for identifying and encouraging superior performance and managing affairs based on evaluation results (Safari, 2013). Despite the claims of the owners of performance measurement and management frameworks, there is no such thing as the best solution for managing the performance and medicine of the organization. The reason is that the concept of performance of the organization itself is multi-faceted, and the complexities of today's performance management systems are the only answers to some of these aspects (Neely, Adams & Kennerley, 2002). Performance management requires behaviors to be analyzed and actions to be measured.

Additionally, employees should be given feedback, strengthened, and encouraged to more desirable actions and behaviors (AbolAlaei, 2010). Defining performance is vital for managers to help predict performance. Performance management is not confined to measuring performance, nor is it limited to measuring performance, or reprimanding employees. Performance management is a convenient tool to guide the organization toward strategies and strategic intentions (Amiran, Ghafari & Sheikh, 2012). A sustainable Supply Chain (SSC) connotes the simultaneous integration of ecological, economic, and social actions of operations in the SC. Considering all three sustainability metrics, organizations must evaluate their functions and operations across the supply chain. A local, short-term approach to sustainability is inappropriate (Jabbour, Song & Godinho, 2020). Performance measurement in public organizations has experienced growth for decades. Designing, adapting, and implementing this style of management system has been the subject of many professionals and researchers (Holzer, Ballard, Kim, Peng & Deat, 2019). Sustainable development is one of researchers' most critical concerns in recent decades because all dimensions and aspects encompass human life. Accordingly, the term development refers to improving the level and quality of life of individuals and improving the general welfare of society and its sustainability. It also refers to continuing this process throughout human generations (Ismailzadeh, Fani & Abdoli, 2018). Sustainability management practice is deemed challenging in companies and requires a sound and practical management framework that integrates all relevant actions and performance dimensions for excellent performance (Tasleem, Khan, Shah, Saleem & Nisar, 2017).

Numerous obstacles exist to the long-term success of public and private organizations, and

this research seeks to recognize and categorize them. Employing bibliometric networking and taking a meta-synthesis approach, this research demonstrates the significant factors for organizations hoping to create a stable performance system that could function effectively over time.

Literature Review

A principal component factor analysis was performed in a study by Gadenne, Sands and Mia (2012). The results demonstrated that environment, new product innovation, customer acquisition, retention, and information systems capability objectives were positively related to recent product sales. It was displayed that environmental goals, information systems, staff welfare, and community participation were positively associated with ecological budget allocation. Also, customer acquisition and retention, employee well-being and social involvement, and organizational profitability goals positively influence customer satisfaction. Finally, the capability of information systems, the purposes of employee welfare, and community participation are positively related to employee satisfaction (Gadenne et al., 2012).

Human resource management (HRM) is still conceived as an unknown area in terms of performance, and therefore, multiple unanswered questions arise from this issue. The critical link is the manager in human resource management, who is responsible for the joint implementation of HRM practices. From this perspective, managerial performance is an essential assumption for the successful management of employees, mainly their job performance. Managing individuals cannot perform without social competence, which is inevitably and significantly influenced by the manager's social intelligence. The association between social intelligence and performance motivation has been examined on a sample of interviewees and the effect of social intelligence on management. The results of further research and conclusions would take us beyond this area, which requires more academic attention (Korauš, Kaščáková, Parová & Veselovská, 2017). The study on designing the performance management model of government agencies has been implemented in two phases of planning and evaluating the status of executive agencies based on the final model. The case study strategy and content analysis method were employed in the qualitative part. The findings of this research reveal that access to a desirable model to fulfill all the requirements of performance management in the public sector necessitates considering the role of all actors and their activities (Mohammadi, 2016). A study by Setiawan et al. (2021) investigated the relationship between green intellectual capital and sustainable performance. While many studies have focused on sustainability, this study was among the first to concentrate exclusively on green intellectual capital. The results exhibited that green intellectual capital positively influenced economic, environmental, and social performance.

The aim of the research, evaluation, and comparison of key performance indicators of sustainable development in the petrochemical industry using SMAA and SMAA-S is to identify the key performance indicators of sustainable development of the Iranian petrochemical industry. Determining key performance indices concerning a five-year average performance benchmark of sustainable development has been another essential objective of this study. A new perspective on corporate governance reveals vital performance indicators as the economic aspect, including revenue growth, percentage of return on assets, and the ratio of profit to income; the environmental element, including consumption of safe water, production of greenhouse gases, burners, oil stains, and waste reduction; social aspect, including prevention

of corruption, the number of injuries and the amount of development and training of the forces. Also, the rankings of the companies and their pairwise comparison and identifying the strengths and weaknesses of each company were conducted precisely. The burner was also recognized as the most critical indicator regarding sustainable development. The findings of this study indicate that companies active in the petrochemical industry should pay special attention to the critical burner index while considering the multidimensional view of governance and creating value for all stakeholders (Shahhosseini, Javaheri Shalamani, HasanqholiPor Yasori & Rostami, 2019).

Over the past few decades, the issue of sustainable development has attracted much attention. More companies are pursuing a strategic vision to integrate environmental considerations with corporate strategies. However, there is still a problem with the strategic alignment between the ecological dimensions of sustainability and the performance management system (PMS). In this regard, to help future research on the integration of effective approaches and solutions, the study sought to draw a clear picture of the critical factors of the need for the process of integrating environmental dimensions and performance management systems and tried to identify forgotten research challenges and opportunities (Hristov, Appolloni, Chirico & Cheng, 2021).

The present study provides an innovative framework for exploring the performance management system's environmental, economic, social, and performance aspects. We also offer research guidelines and valuable advice for future researchers and activists. In addition, this research provides a solid scientific basis for future research studies and discussions.

Materials and Methods

An investigation of numerous articles reveals that there has not been a comprehensive view regarding the components of sustainable performance management; nevertheless, lack of managers' consideration of all dimensions of sustainability, i.e., economic, social, and environmental, and its impact on performance management is noticeable in a way that has affected the productivity of performance management. Accordingly, taking a comprehensive perspective on this issue is necessary to provide management professionals with the latest developments. This study is of a qualitative type, which was carried out using the meta-synthesis method and the approach of illustrating bibliometric networks. Various scientometric software was employed for the primary analysis of the research data. This way, the previous authors' brainstorming was obtained using the Qiqqa software. Selected articles were identified and entered into this software with the help of six professionals and academics in this field based on the high relevance of the topic. VOSviewer software was also employed to visualize bibliometric networks. This software extracted sub-topics associated with sustainable performance management using the lexical co-occurrence method.

Moreover, the relationship between the following subject areas was investigated from 1998 to 2022. The software analyzed the obtained data. In correcting and unifying the authors' names and keywords, potential errors in the Excel files were carefully reviewed and corrected so that the plural and singular forms of the same and synonymous words were also edited. After modifying and editing the Excel files of the authors and keywords, the results were produced with accuracy. First, all the keywords of the articles were homogenized to identify the thematic clusters. Then, thematic clustering of the articles was conducted by selecting the keywords repeated at least three times. Using the Bib Excel software, the co-occurrence file of these

keywords was prepared, and its output was entered into the "VOSviewer" software until its final output was obtained.

The meta-synthesis method is implemented to identify critical factors related to the management of sustainable organizational performance. Like meta-analysis, the meta-synthesis is used to integrate multiple studies to create comprehensive and interpretive findings. Although most articles on the critical factors in managing sustainable organizational performance are qualitative and quantitative, the meta-synthesis method has been employed as a suitable method to obtain a comprehensive combination of this subject based on the translation of limited quantitative and qualitative studies. The meta-synthesis is not a summary of the interpretations of similar studies; nonetheless, integrating the performances of the main findings of the selected studies to create comprehensive and interpretive findings indicates the researcher's deep understanding in this regard. In fact, instead of providing a complete summary of the findings, an interpretive combination of findings is created. This research method explores new and essential topics and metaphors by giving a systematic perspective for researchers through a variety of different research studies. This method expands current knowledge, providing a comprehensive and holographic view of the problems. The researchers also conducted an in-depth review and combined related research findings. Sandelowski and Barroso (2006) have introduced a seven-step method. In this regard, researchers have explored past research in the field of sustainable organizational performance management in Iran and the world, introduced by Sandelowski & Barroso (2006), to achieve the purpose of the present research. The steps for implementing the meta-synthesis method based on the Prism diagram (Figure 1) are as follows:

The steps to implement the meta-synthesis method include:

- Set up a research question
- A systematic review of the literature
- Search and select appropriate texts
- Extract textual information
- Analysis and composition of qualitative findings
- Quality control
- Findings

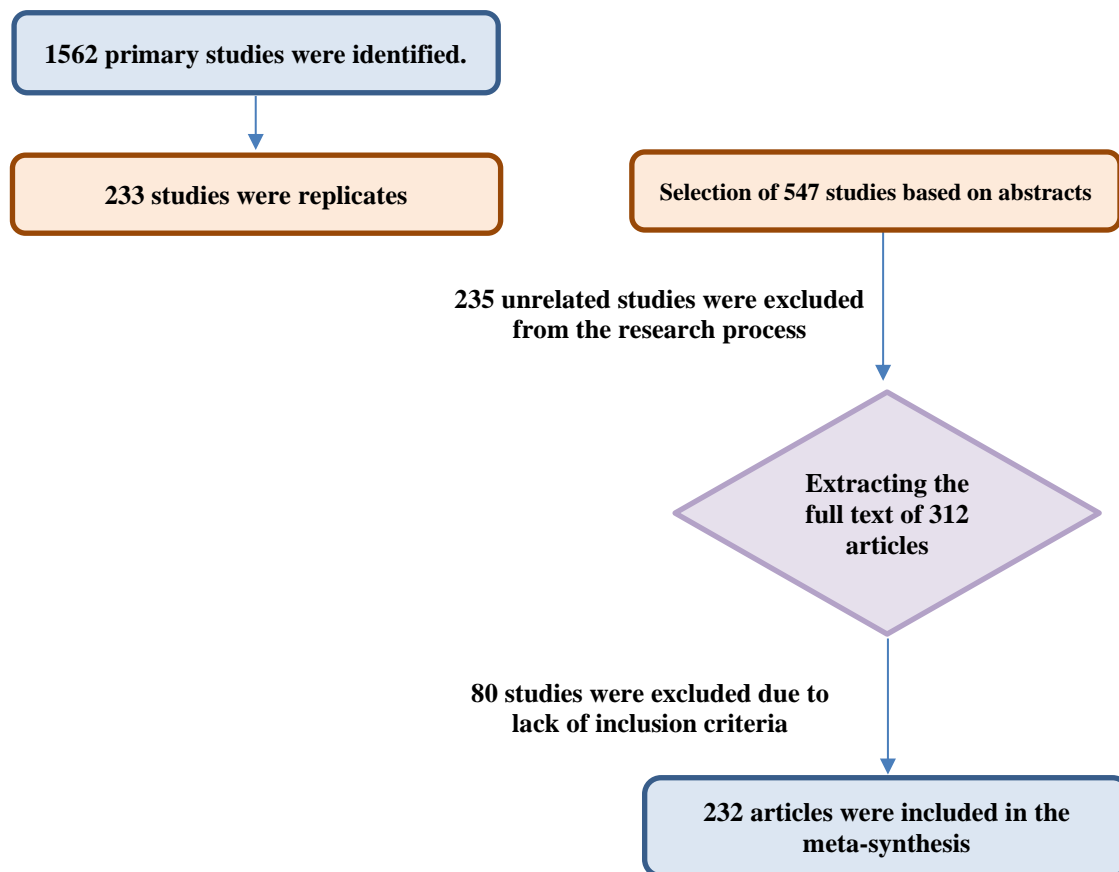


Figure 1: Systematic Research Review Map

Step 1: To address the research question, four main parameters are employed: the study population and what, when, and how the method is used. In this study, the following central question was adjusted using four parameters: What are the dimensions and components of organizational performance management according to previous research?

Step 2: To answer the question raised in the first step of the implementation of meta-integration, researchers implemented four sustainable development, sustainable development management, sustainable performance development, and sustainable performance management by exploring and exploiting databases including Emerald, Proquest, SID, and the Web of Science, as well as the Google Scholar and students' dissertations defended in recent years retrievable from Ganj website at <https://ganj.irandoc.ac.ir/#/>.

Step 3: The number of sources initially found was 1562, including 233 duplicate studies, of which 547 were selected based on their abstracts. Afterward, 235 studies were excluded due to irrelevance. Three hundred twelve studies were extracted from the complete text, of which 80 were excluded due to lacking inclusion criteria. Finally, 232 contents of the remaining articles were examined. Also, the number of universal themes is one, constructive themes four, basic themes seven, and the frequency of extracted code is 467.

Step 4: Extract textual information. Throughout this method, the researcher had to constantly review the selected and finalized articles several times to reach the findings within the separate content in which the primary and initial studies were performed. Three professionals have reviewed selected papers in three series and two authors in eight.

Step 5: Analysis and composition of qualitative findings. The overarching goal is to create a unified and new interpretation of the findings. This method clarifies the concepts, patterns and results in refining the existing states of knowledge and the emergence of operational models and accepted theories. During the analysis, topics are searched which have emerged among the studies available in the meta-synthesis. As subjects are identified, the examiner forms a classification and places similar and related categories in a subject that best describes it. Topics provide the basis for creating explanations, models, theories, or working assumptions. All the factors extracted from the studies were considered components in the present study. Then, considering the concept of each code, they were classified into similar ideas to form the ideas of the research. There are three universal themes: constructive theme 3, basic theme 11, and extracted code 467.

Step 6: Researchers have considered the following procedures to maintain the quality of their study:

- Take the steps taken by providing clear explanations for the options available in the research.
- Both electronic and manual search strategies should be used to find relevant articles. Thus, the researchers surveyed the library and the Internet. Internal research stands at 8.5%, and the result of searching from Latin sources is 91.5%.
- It is necessary to employ the quality control methods used in primary qualitative research studies.

Step 7: At this stage, it is necessary to present the findings of the previous steps.

Results

Researchers recognized keywords related to the research subject according to the word cloud (Figure 2) and the brainstorming method with the help of Qiqqa software (Figure 3). Then, VOSviewer software extracted the vocabulary of the co-occurrence network. This network and the identified hotspots laid a solid foundation for the next step in the research, the hybrid method.



Figure 2: Research Vocabulary

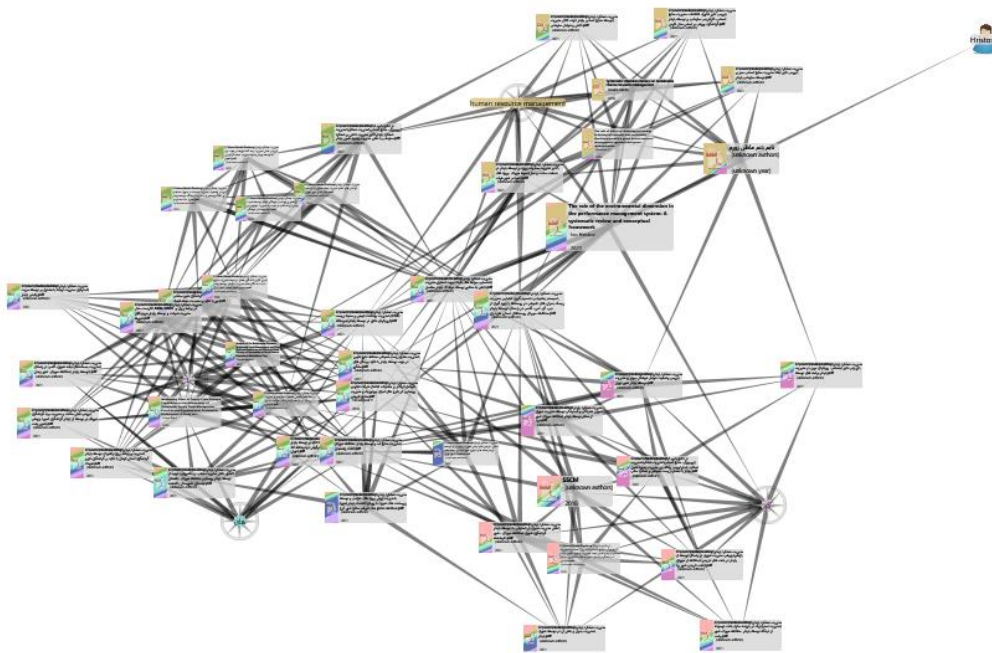


Figure 3: Library Brainstorming in Qiqqa Software

The Co-occurrence Network of Research Vocabulary (Figure 4), Another View of the Co-occurrence Network of Research Words (Figure 5), and the Coexistence of Vocabulary and Research hotspots (Figure 6) are the results of VOSviewer software.

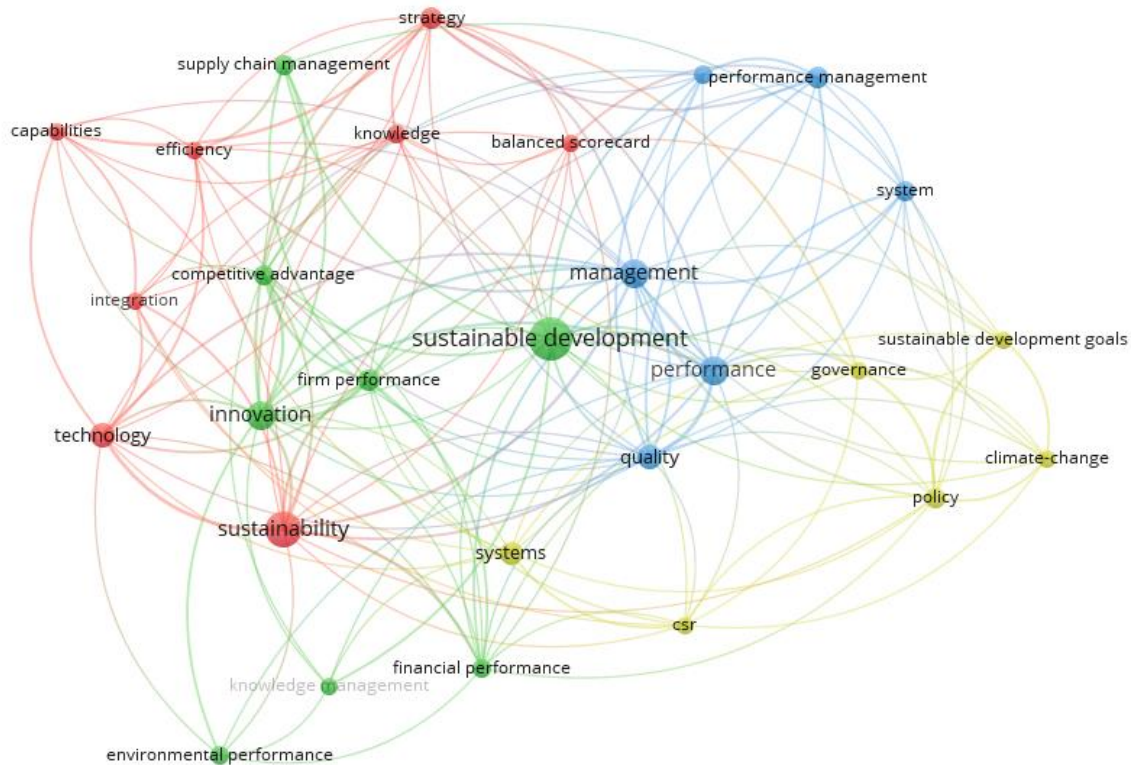


Figure 4: Co-occurrence Network of Research Vocabulary

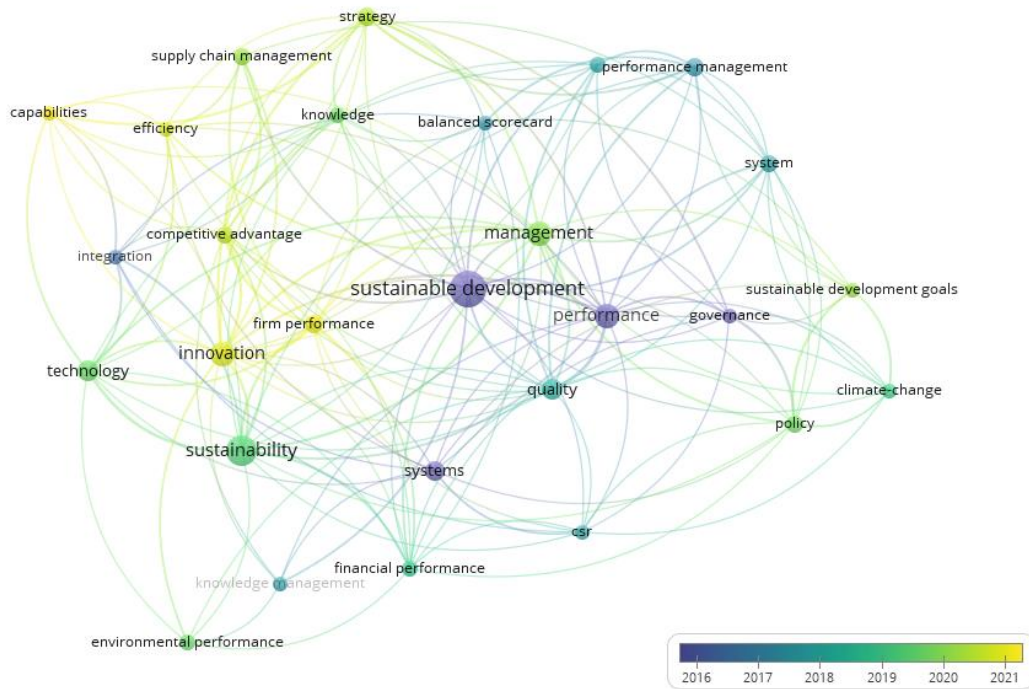


Figure 5: Another View of Co-occurrence Network of Research Words

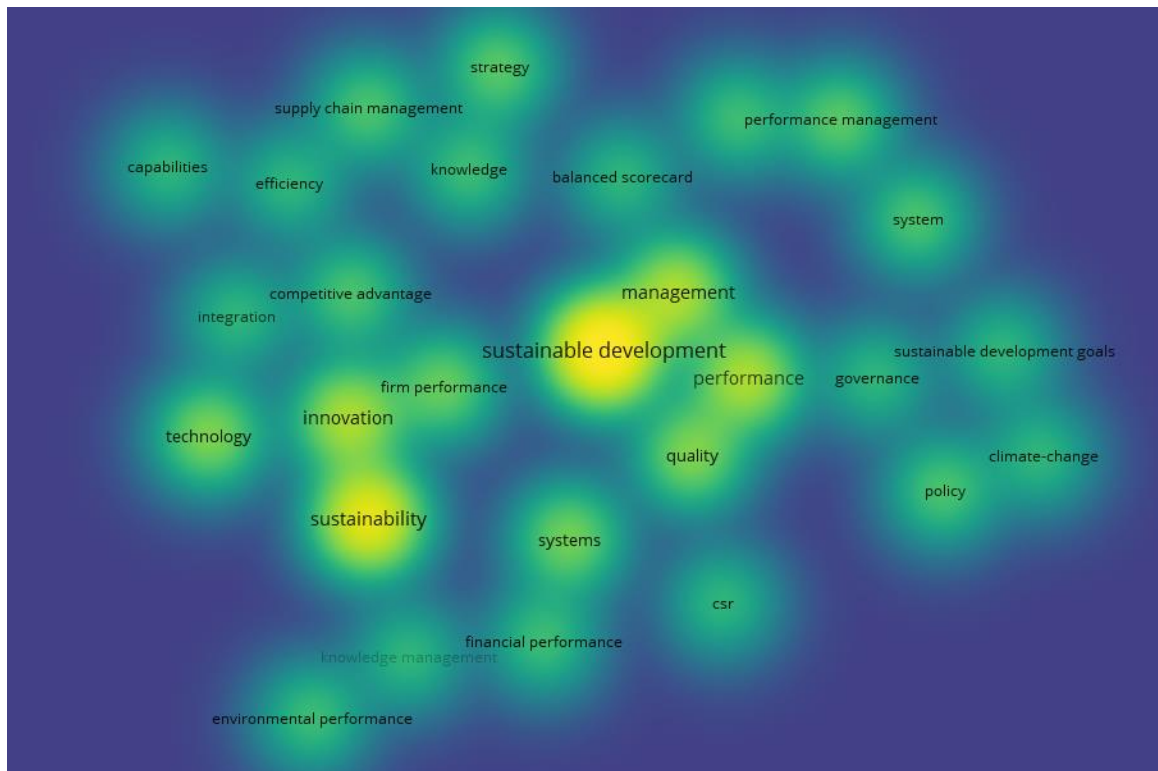


Figure 6: Coexistence of Vocabulary and Research Hotspots

Following previous steps, all codes considered by the researchers were extracted through content analysis, as shown in Table (1). The identified codes were then classified into one comprehensive theme. Inclusive themes include sustainable organizational performance

management. Three constructive themes and seven basic themes were identified. The frequency of the articles indicates the degree of focus required on that theme. Therefore, human resource managers need to monitor critical issues in the organization and take strategic actions based on them.

Table 1
Coding of Sustainable Organizational Performance Management

Comprehensive Themes	Constructive Themes	Basic Themes	Extracted Codes	Article Code	Frequency
Sustainable Performance Management	Modernity	Innovation	Innovative Approach, Organizational Innovation Development, Green Innovation, Green Product Innovation, Innovative Idea, Environmental Innovation, Strategic Innovation Management, Entrepreneurial Orientation Innovation, Innovative Business Models, Innovative Problem Solving, Financial Innovation, Innovation Based Sustainability (SOI), Innovative Portuguese SME, Process Innovation, Innovative Solutions, Technology Innovation, Environmental Innovation, Innovation Leadership	2- 8- 12- 14- 19- 25- 32-38- 39-44- 49- 51-58-61- 62- 72-75-79-82-89- 98-119-121-133- 137-177-183-188- 190-191-193-207- 212-226-230-231	36
		Technology and System	Industry Technology 4 (I4), Block Chain Technology, Sustainable Electronic Human Resource Management Systems (E-HRM), Integrated Management System (IMS), Network Science, Digital Supply Chain (Data-Driven), Internet of Things, Big Data Technology, Artificial Intelligence, Transformation of Scientific and Technological Achievements and Human Capital Level, Management Accounting System, Collaborative Human Resource Management System (CHRMS), Customer Relationship Management (HRDCRM), Technology Commercialization, Digital Technologies, Technology Management (TM), Dominant Sustainability Systems (SDS), Technology Innovation, Enterprise Information Technology Capability, Green Technologies, Technology Alignment, Green Data Center Management, Planning and Control Systems (P&C), Enterprise, Soft Design	3-4-22-35- 46- 50-58-68-72-73- 82--86-92-164-99- 116-128-133-165- 177-179-208-213- 214-217-218-230- 231	38

Comprehensive Themes	Constructive Themes	Basic Themes	Extracted Codes	Article Code	Frequency
			Commercial Software for Space, Sustainable Knowledge Management Performance Evaluation System (SKMPES)		
	Supply Chain Management	Supply Chain	Supply Chain Management, Sustainable Service Supply Chain Management, Supply Chain, Socially Sustainable Supply Chain Management, Supply Chain Risk Management (SCRM), Digital Supply Chain (Data-Driven), Management Sustainable Supply Chain, Sustainable Supply Management, Repair Logistics Management, Environmental Supply Chain	9- 12- 14- 17- 20- 28- 34- 35-38-40- 45- 50-54-58-68- 80-103-106-115- 120-122-147-148- 149-154-158-166- 199-205-206-209- 221	32
	Knowledge Management	Organizational Knowledge	Sustainable Competitive Advantage, Intangible Skills, Talent Management, Organizational Learning, Resilience Engineering, Learning, Intangible Skills (Intellectual Capital, Financial Literacy, Business Experience), Strategic Knowledge Management, Creative Performance, Knowledge Development, Knowledge-Based Culture, Knowledge-Based Economy, Sustainability-Based Knowledge Management Performance Evaluation System (SKMPES)	10- 13- 18- 19- 28- 55- 56- 61- 60-62-71-75-88- 89-92-104-110- 115-121-126- 131- 132-141- 155-165- 178-190-218-222- 223-228	32
	Stability	Economical	Balanced Scorecard, Circular Economics (CE), Investment Level, Intellectual Capital Accounting, Profit-Based Indicators, Sustainable Human Resource Management, Financial Innovation, Operating Cost, Organizational Risk Management, Economic Sustainability, Financial Environment, Management Accounting System, Environmental Management Accounting, Net Profit, Econometrics, Triple Performance (TBL), National Awards (NQAs), Quality Management, Knowledge-Based Economy, Economic Transformation, Ethical Economics Green Economy, Physical Asset Management (PAM), Economic Growth, Financial and Strategic Planning Tools, Success Competition During the Economic Crisis, Cash Value	3- 7- 11- 20- 23- 27- 32- 36- 38-42- 43-49- 51-53-61- 65- 67- 69- 70-71- 72- 73-74-76-79- 83-84-85- 91-93- 97-106-108-109- 111-112-114-116- 118-119-124-128- 132-134-135-139- 140-141-144-145- 149-150-151-152- 153-154-155-157- 161- 162- 164- 167-169-170-171- 172-173-176-180- 181-182-183-185- 186-188-192-194- 195-197-199-202- 203-204-205-207- 210-211-212-216- 219-220-224-227- 231	95

Comprehensive Themes	Constructive Themes	Basic Themes	Extracted Codes	Article Code	Frequency	
			Added (CVA), Environmental Budget Allocation, Economic Sustainability			
		Social	Sustainable Human Resource Management (Social Dimension of Sustainability), Nurses' Professional Affiliation, Human Capital, Social Entrepreneurship, Social Performance, Accountability, Responsibility, Justice, Prevention of Corruption, Amount of Injuries, Development Rate and Staff Training, Organizational Entrepreneurship, Corporate Social Responsibility, Balanced Scorecard, The Role of Each Actor and Their Activities, Human Development, Government Management, Intellectual Capital (IC), Social Business, Customer Participation, Quality of Life, Relationship Management Customer, Corporate Social Responsibility, Conflict Management Strategies, Team Management, Diversity Management, Corporate Social Responsibility Practices, Collaborative Human Resource Management System (CHRMS), Relationship Commitment (RC), Customer Relationship Management (HRDCRM), Organizational Citizenship Behavior, Competitive Culture, Society, Triple Performance (TBL), National Awards (NQAs), Quality Management, Organizational Justice, Work-Life Balance Program, Knowledge-Based Culture, Work-Life Balance, Inclusive Social Practices for Employees, Inclusive Social Practices for Society, Social Capital, Participation, Participatory Management	7- 15-23- 26- 29- 31- 35- 36-38-42- 43- 44-49-52- 53- 54-57- 62- 63- 65-70-74-76-79- 82--83—84--86- 87-91-96-97-100- 104-106-108-111- 112-113-114-115- 116-118-124-130- 134-135-136-139- 140-141-143-166- 146-149-150-151- 153-155-156-159- 161- 162-163- 167-168-169-170- 171-172-173-244- 176-179-180-182- 183-184-186-187- 188-192-194-195- 196-198-199-200- 201-202-203-204- 205-207-215-217- 219-220-221-225- 227-229-231-232		105
		Environmental	Green Human Resource Management, Energy Consumption, Environmental Pollution, Environmental Performance, Safe Water Consumption, Greenhouse Gas Emissions, Burners, Oil Slicks and Waste Reduction, Balanced Scorecard, The Role of Each Player and Their Activities, HSE,	1- 5- 6- 7- 12-14- 15- 16- 20-21- 23- 24- 25-26- 29- 30- 31-32- 36-37- 38- 41- 42-47-48- 49- 53-57-62-65- 66- 70- 74-75-76-77- 79-80—81-83-84- 85- 87-89-90-95- 97-100-101-102-		129

Comprehensive Themes	Constructive Themes	Basic Themes	Extracted Codes	Article Code	Frequency
			Green Management, Environmental Management Control System (MCS), Natural Resources Based Perspective (NRBV), Green Supply Chain Management, Green Product Innovation, Green Practices, Green Recruitment, Green Performance Management, Green Human Resource Management (GHRM), Environmental Management, Waste Improvement and Elimination, 5S, Green Design, Mental Safety, Corporate Social Responsibility, Sustainable Human Resource Management, Biodiversity Index, Environmental Strategies, Environmental Management Accounting, Green Organizational Culture Enhancers, Performance Three (TBL), National Awards (NQAs), Quality Management, Green Economy, Safety Management, Green Data Center Management, Environmental Supply Chain, Environmental Budgeting, Health-Safety-Environmental Accidents, Quality, Health, Safety and Environment	105-106-107-108-111-112-113-114-116-117-118-119-123-124-125-127-129-130-134-135-138-139-140-142-145-146-148-149-150-151-152-153-154-155-156-158-159-160- 161-162-166-167-168-169-170-171-172-173-176-180-182-183-184-186-188-189-192-194-195-196-198-199-200-201-202-204-205-207-208-209-212-219-220-221-225-226-227-231	

Discussion

The present study has analyzed multiple perspectives regarding sustainable organizational performance management and summarized the results of the studies conducted in this field to consider sustainable organizational performance management as an overarching theme through a meta-synthesis approach. Surveys show that the starting point of research in this field began with the study of Basu and Kumar (2004) in the field of innovation, technology, social, economic, and environmental factors, and with time, the number of research in this field increased. In comparison, the growth trend of this research in recent years is exponential. Perhaps one of the reasons for the growth of this research is related to the interest of researchers in the issue of sustainability. Among the 232 identified studies, most researchers such as Fechete and Nedelcu (2019), Kusriani and Primadasa (2018), Loa and Wibisono (2018), and Chardine-Baumann & Botta-Genoulaz (2014), focus on one or three components of sustainability, i.e., economic-financial, social, and environmental dimensions, they emphasized.

Others have tried to identify the relationship between the three components of sustainability and performance management. In the article Sustainability and Corporate Social Responsibility in the Opinion of Undergraduate Students by da Silva Junior, de Oliveira Martins-Silva, de Araújo Vasconcelos, da Silva, de Brito, M. S. & Monteiro (2019), the opinion of management degree students in a Brazilian university has been analyzed regarding the concept of sustainability and corporate social responsibility. Regarding the theory, this research was

focused on the stakeholder theory to understand the concepts of sustainability and corporate social responsibility. The results related to the students' concept of sustainability show that its economic dimension is more dominant than others and that fair dealing with economic, social, and cultural dimensions exists only in the abstract field. Regarding corporate social responsibility, the evidence shows that the most critical dimensions in the hierarchical order are ethical, moral, legal, and economic. Yusliza, Yong, Tanveer, Ramayah, Noor Faezah and Muhammad (2020) investigated the relationship between green intellectual capital and sustainable performance. While many studies have focused on sustainability, this study is one of the first to focus exclusively on green intellectual capital. This research used survey data from 112 manufacturing companies in Malaysia. Green intellectual capital positively affects economic, environmental, and social performance. The novelty of this study is to reveal the contribution of green intellectual capital as an intangible resource for organizations in achieving sustainable performance and a competitive advantage for future researchers.

A moderated-mediation analysis of psychological empowerment: sustainable leadership and sustainable performance (Iqbal, Ahmad, Nasim, and Khan, 2020) is, to date, the first attempt to integrate psychological empowerment and psychological safety to redefine the relationship between sustainable leadership and sustainable performance. The empirical results of this research confirmed that sustainable leadership has a significant impact on psychological safety. Also, sustainable leadership has a positive indirect effect on sustainable performance through psychological safety, which is strengthened by psychological empowerment. Creating a psychologically safe environment that encourages knowledge sharing and openness to discourse improves sustainable performance in the presence of sustainable leadership. This limited attitude in previous studies made researchers look for research that is comprehensive in its time and can identify more components. Therefore, the main question addressed potential components of sustainable organizational performance management. To the best of our knowledge, this topic is unprecedented in management. In addition, the approach of illustrating bibliometric networks is one of the preferences of this study when compared to previous research conducted in management using VOSviewer software. VOSviewer reveals that the themes of innovation, technology, and knowledge management are among the hot topics in the field of sustainable performance management, which have attracted the attention of researchers in recent years. Since the number of these studies is small, the number of hotspots of this theme in VOSviewer software is smaller than other themes. Supply chain management is also one of the strategic hotspots presented in this software; nonetheless, this concept has been paid less attention in the literature on sustainable organizational performance management in recent years. For example, Isnaini, Nurhaida, and Pratama (2020) investigated the moderating effect of dynamic supply chain capabilities on the relationship between sustainable supply chain management practices and sustainable organizational performance.

Three main sustainability concepts, environmental and economic management, remain hot and essential topics confirmed by meta-synthesis data. The main theme of sustainable development in the network prepared by VOSviewer software has been identified because the bigger the circles, the stronger the theme. The research clusters are also portrayed with separate colors in the co-occurrence network of research words. The higher the strength link, the smaller the distance between two or more topics. In addition, the simultaneous employment of two methods of illustrating bibliometric networks and meta-synthesis helps researchers to identify themes more intelligently. According to the extracted data and observing the hotspots of the

VOSviewer software, the need to consider innovation, technology, sustainability, supply chain management, and knowledge management is felt more than ever.

The same themes were also extracted with the help of meta-synthesis, and these two research methods complemented each other to confirm the results of the word co-occurrence network. The meta-synthesis is a qualitative method based on a systematic review of library studies for an in-depth understanding of a studied phenomenon. Meta-synthesis is considered a qualitative research method, and the means of data collection are library studies and research background checks (Malekolkalami, Hassanzadeh, Sharif & Rezghi, 2023). In this article, the researchers examined the frequency of articles from different aspects and found that consideration of environmental themes accounted for the largest number of articles. For example, the article *Eco-innovation, Sustainable Supply Chains, and Environmental Performance in European Industries* (Costantini, Crespi, Marin & Paglialunga, 2017) examines the role of communication between sectors in shaping the economic influence of environmental innovations on environmental performance. Empirical findings show that both direct and indirect effects of environmental innovations help to reduce environmental stress, and the strength of these effects in the value chain is different. The purpose of this article was to review the previous research to organize the intellectual system of the researchers in this field and to help by expressing their essential themes in the direction of the implementation of future research. One of the limitations of this article is the researchers' attention to the qualitative method. It is suggested that other researchers utilize a quantitative method or a mixed method (quantitative-qualitative).

Among other limitations of this research, we can point to the lack of internal sources on the subject. In future studies, the sustainable organizational performance management theme should be explored in an organization on a case-by-case basis. According to the themes of this research, researchers can conduct a more in-depth case study and research one or more themes in practice and identify the challenges and opportunities obtained due to the application of these themes in the organization. In addition, as mentioned previously, the themes of innovation, technology, and knowledge management are hot topics in sustainable performance management; nevertheless, few articles have been published on them. Researchers interested in sustainable performance management can focus on these three topics.

Conclusion

Human resource managers have to establish a solid relationship with sustainability aspects of management to address the problems arising from performance management at the organizational and individual levels. Until recently, researchers have not yet been able to identify all the dimensions of performance management. Most researchers in sustainable performance management have examined sustainability from economic, social, and environmental dimensions and failed to address other aspects. The present study revealed that the management of sustainable organizational performance is not restricted to economic, social, and environmental dimensions. Consequently, managers and researchers should expand their perspectives on this issue. Constructive themes such as innovation, supply chain management, and knowledge management are other issues related to sustainable performance management literature identified in this research. In addition to the fact that hot topics related to sustainable performance management have been visualized, the co-occurrence network of research vocabulary exhibits the presence of other components such as strategy, corporate social

responsibility, systems, quality, capabilities, etc. Such innovative components could not be achieved except through illustrating bibliometric networks and the meta-synthesis approach. Researchers could use the present study's findings to extract the primary results of their future work.

Ethical Considerations

All processes involved in the preparation of this study were considered with the observance of ethical considerations and standards, including the freedom of the acceptance of cooperation by the respondents, willingness and satisfaction to complete the questionnaire, fidelity in using the data, and confidentiality.

Conflict of Interest

The authors declare no conflict of interest in the present study.

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