Analysis of the state of the art on Team Management in SMEs

Análisis del estado del arte sobre Gestión de equipos en Pyme

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Abstract

Effective team management is crucial for the success and growth of SMEs. This research aims to analyze the evolution of team management in SME projects between 2010 and 2020. Through a comprehensive bibliographic review methodology in the Scopus, and Web of Science databases, the main authors, most cited publications, associated factors, and methodologies used were identified. Selected original scientific literature, and review in English and Spanish, published between 2010 and 2020 for bibliometric analysis. The results highlight the importance of human resources management in achieving objectives and improving processes in SMEs. It is concluded that both individual management and team management are equally important for the proper functioning of SMEs.

Keywords: Team management; Human Resource Management; SMEs; Projects.

JEL Classification: M12, L250

Resumen

La gestión efectiva de equipos es crucial para el éxito y el crecimiento de las Pymes. Esta investigación tiene como objetivo analizar la evolución de la gestión de equipos en proyectos de Pymes entre 2010 y 2020. Mediante una metodología de revisión bibliográfica exhaustiva en las bases de datos Scopus y Web of Science, se identificaron los principales autores, publicaciones más citadas, factores asociados y metodologías utilizadas. Se seleccionó literatura científica original y de revisión en inglés o español publicada entre 2010 y 2020 para el análisis bibliométrico. Los resultados resaltan la importancia de la gestión de recursos humanos en el logro de los objetivos y mejora de los procesos en las Pymes. Se concluye que tanto la gestión individual como la gestión en equipo son igualmente importantes para el correcto funcionamiento de las Pymes.

Palabras clave: Gestión de equipos; Gestión de Recursos Humanos; Pyme; Proyectos. Códigos JEL: M12, L250

Introduction

SMEs as companies that drive the economy worldwide are experiencing of the most difficult times in history. This has undoubtedly been a year of great challenges, due to the crises caused by the COVID-19 pandemic, which according to the United Nations Development Program - UNDP Latin America and the Caribbean, "COVID-19 pandemic is one of the most serious challenges that humanity has faced in recent times. It is still unknown what its total cost in human lives will be" (2020, p. 3). The bankruptcy of many companies is expected, especially in the tourism and entertainment industry which maintain a high level of social contact, as well as SMEs with low levels of working capital and limited access to credit lines, whose restructuring or reengineering could be in a long lasting, wasteful and expensive process. Thus, according to Veugelers et al. (2019), the viability of many formal micro and small enterprises will be affected to a greater or lesser degree by the containment measures of COVID-19. Many formal MSMEs have no reserves to endure a prolonged period of zero or low activity, needing support to resume their activities when economies gradually move towards revival (Weller, 2020).

Given these situations generated worldwide, and concerns on the part of many entrepreneurs or owners of SMEs, this research aims to provide relevant information regarding the field of knowledge of team management in SMEs, since it allows to manager determine the characteristics, approaches, or trends of the scientific literature on the related subject evidenced in the last years in Scopus, as well as the results, and conclusions reached by different authors. This contributes to the development of future research in the field, as there are knowledge gaps and areas to be deepened in future research on the field. To achieve the proposed objectives, a bibliometric analysis of the state-of-the-art of team management in SMEs was carried out to know the most representative authors, the most cited publications, associated factors, methodologies used and frequent research approaches.

A frame of reference was structured that served to make visible the research background on this topic and the different concepts or definitions that exist in the literature on the research topic. The methodology that was implemented in this work was consistent with bibliometric studies that are not usually developed with the traditional scientific methodology (type of research, population, and sample), due to its documentary nature, and that does not work with individuals or social groups, but with the existing literature in the field. Therefore, the methodological design section mentioned the process followed in the search for information, the number of articles, books, or academic references selected. Finally, the findings were structured according to the specific objectives.

Theoretical Foundation

In situations of uncertainty, and permanent changes that the world economy is experiencing as the result of the crisis caused by COVID-19, it is becoming increasingly important to analyze the behavior of SMEs, their strategic management, and of course the team management. Due to that and considering the importance of SMEs worldwide, before talking about Team Management or Human-Resource Management, it is important to make a brief explanation of the concept of SMEs (Pyme), their import and global connotation.

A walk through the SMEs

The term SME is widely recognized and used throughout the world, encompassing a wide range of definitions and measures, varying its meaning from one country to another for different purposes (Ayyagari et al., 2003; Sava et al., 2013; International Financial Reporting Standards Foundation - IFRS® Foundation, 2018). Most countries define SMEs according to their size, total assets, total sales revenue, and number of employees (Uyar & Güngörmüş, 2013; Bohušová & Svoboda, 2016). However, according to Ayyagari et al. (2003), the most common definition base used is employment, with a variation in the definition of the upper and lower size limit of an SME, which some sources place in a cut-off range of 0-250 employees. However, "SMEs have an important position in the global economy. The accounting information provided by them must have the same role" (Sava., 2013, p.715). Therefore, "there is more and more literature indicating that small and medium-sized enterprises (SMEs) are of great importance for macroeconomic growth. For much of the last decade, SMEs in Europe have experienced impressive growth" (Mateev et al., 2013, p.29).

In Colombia, the classification of MSMEs is regulated in Law 590 of 2000 known as the MSME Law and its amendments (Law 905 of 2004). This regulation was modified by Decree No. 957 of June 5, 2019, as detailed below:

Table 1.New classification of companies in Colombia

SectorS	ize	Income from ordinary activities less than or equal to			
		UVT (\$34.270, 2019)		\$ In Colombian Pesos	
		>	<	>	<
Manufacturer	Micro	_	23.563	-	_
	Small	23.563	204.995	807.504.010	807.504.010
	Median	204.995	1.736.565	7.025.178.650	7.025.178.650
	Big	1.736.565		59.512.082.550	59.512.082.550
Services	Micro	=	32.988	-	_
	Small	32.988	131.951	1.130.498.760	1.130.498.760
	Median	131.951	483.034	4.521.960.770	4.521.960.770
	Big	483.034		16.553.575.180	16.553.575.180
Commerce	Micro	=	44.769	-	-
	Small	44.769	431.196	1.534.233.630	1.534.233.630
	Median	431.196	2.160.692	14.777.086.920	14.777.086.920
	Big	2.160.692		74.046.914.840	74.046.914.840

Note. own elaboration based on information Decree No. 957 of June 5, 2019.

According to Confecámaras (2016) have a share in the economy above 99% of the national conglomerate, that is, for the year 2016, microenterprises represented 92.1% of the national conglomerate, small 5.9%, medium 1.5% and large 0.5%. This undoubtedly reflects the importance of this conglomerate in Colombia.

Team Management or Human Resource Management

Performance can be characterized as the company's ability to create acceptable results and ac-

tions (Pfeffer & Salancik, 1978). However, to this day there is no clear and complete evidence to explain the factors affecting the growth, and performance of SMEs (Pasanen & Laukkanen, 2006). According to research conducted by Mintzberg (1978), strategy affects the company's performance.

Hargis and Bradley (2011) point out that better strategic alignment of HR practices is necessary to ensure the competitiveness of SMEs.

It can be said that intuitive human resources practices based on the experience of the manager are no less appropriate given the specificities of SMEs (Virag & Albu, 2014) - since it is intuited that they are less sophisticated, less expensive, more flexible and easier to apply, as they do not require specific experience (Birdthistle, 2006; Carroll et al., 1999; Kitching, 2007; Lockyer & Scholarios, 2007; Marlow & Patton, 1993). According to Jaroslav and Petr (2019), the human resources strategy plays a crucial role in consolidating the corporate strategy by enabling effective planning and management of processes. This, in turn, enables organizations to respond flexibly to any changes that may arise. Despite the rapid evolution of strategic human resources management and its relevance, opponents arise in turn of the efficiency with which human resources contribute to the achievement of strategic objectives (Guest, 2011; Lengnick-Hall et al., 2009; Woodrow & Guest, 2014). An exact relationship between human resource management practices and the performance of SMEs (Hooi and Ngui, 2014).

Others continue to corroborate that the strategic management of human resources, mediated by the participation of employees in the exchange of knowledge is a fundamental piece of added value. (Cooke & Saini, 2010) Thus, if HR functions are considered in isolation, they tend to lack congruence in most organizations (Mcevoy and Buller, 2013).

Currently, due to the lack of knowledge regarding HR management in the context of SMEs, it is assumed that different than in large companies, in SMEs HR management is applied on a lower level (Wen, Ibrahim and Ringim, 2020). In other words, it can be said that human resource management practices in SMEs are mainly informal and difficult to change to formal practices (Barrett & Mayson, 2007; Hooi & Ngui, 2014). In addition to the above, the globalized environment prevents many SMEs from reaching their full potential or being forced to end their activities (Hanson et al., 2011; Rodríguez-Gutiérrez et al., 2015)

However, SMEs can overcome a crisis or avoid threats by using resources efficiently or implementing human resources management. (Wuen et al., 2020; Dabic et al., 2011) This consists of adopting a strategic orientation in a conscious to manage the human resources of an organization, and in this way ensures the coherence of management (Garcia et al., 2016). By mixing strategic management with human resource management, strategic human resource management is created, which means that human resources activities must be systematically designed and deliberately connected to an analysis of the company and its context (Schuler et al., 2001).

Therefore, it is important that SMEs leaders consider the current business environment to ensure appropriate human resource management practices, for which it will be essential to invest in human resource management practices which can drive to generate favorable strategic development (Jing et al., 2005; Fabi et al., 2009) Similarly, human resource management practices must be linked to the business strategy to assign employees in key areas of business organizations (Lajara et al., 2003).

Human capital management, being considered at a strategic level and being linked to the performance of companies, has acquired greater relevance (Marco & Úbeda, 2013; Crook et al., 2011; Gong et al., 2009).

Method

This article was carried out through a systematic review of documents focused on organizational management in SMEs. This involved reviewing scientific studies on the subject between the years 2010, and 2020, a period centered around the COVID-19 pandemic crisis that began in late 2019. This research, which included a bibliometric analysis of the state of the art in team management in SMEs, aimed to describe the evolution, approaches, and trends of empirical evidence in this field of knowledge during the years published in the Scopus and Web of Science databases. It is worth noting that Romaní, Huamaní, and González (2011) define bibliometric analysis as a branch of scientometrics that uses statistical and mathematical methods applied to books and other media.

In addition to investigating the state of the art in team management in SMEs, this bibliometric analysis aims to document, review, and analyze information related to scientific production. This allows for estimating the impact of a journal, its influence on recipients, its scientific importance, and its connection with other disciplines. It also helps identify research strengths and opportunities, trends, classify authors according to their productivity and influential creations, among other aspects (Arbeláez & Onrubia, 2014).

To carry out this work, inclusion criteria were established, which included searching the Scopus and Web of Science databases in both English and Spanish, combining keywords such as Team Management, Human-resource management, SME, Gestión de Equipos, and Pyme, both together and separately. In Web of Science, a closed search was conducted using the expression "(Team Management or Teams Management) and (SME or SMEs)". This was done to find the specific phrase or expression under investigation and avoid information biases.

Next, the titles and abstracts of each article obtained in the search were inspected. The following selection criteria were considered: 1. Original research and/or review articles. 2. Works conducted in all publication years of the selected databases. 3. Empirical evidence related to team management in SMEs.

In the initial review conducted in Scopus with a closed search of the title, abstract, and keywords "team's management" and "SME", a total of 8 articles were obtained as a result. Subsequently, when performing an open search with the aforementioned terms in the Scopus database, 468 documents were found between the years 1990 and 2021. Regarding the Web of Science database, using the keywords (Team Management or Teams Management) and (SMEs or SME),

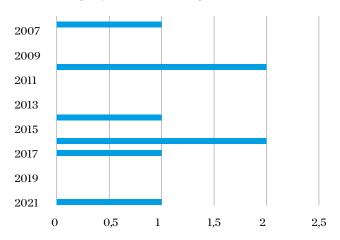
or Gestión de equipos en Pyme, or Human-resource Management in (SMEs or SME), in a closed manner, 615 documents were obtained as a result between 2001 and 2021. The documents consulted in Web of Science come from various fields of knowledge, such as Management, Business, Industrial Relations, Applied Psychology, Environmental Sciences, Economics, among others. The documents consulted in Scopus come from areas of knowledge such as Business, Management and Accounting, Engineering, Computer Science, Decision Sciences, among others.

The analysis of the results was carried out with the help of the VosViewer 1.16.6 program, which allows for the visualization of work networks based on bibliometric analysis of co-occurrence, taking into account variables such as co-authorship, co-occurrence of keywords, citations, bibliographic coupling, or co-citation. Additionally, bibliometric resources provided by the Scopus and Web of Science databases were used to analyze the different types of products in the sample, areas of knowledge, most representative authors, collaborating research organizations, and publications made in recent years.

Results

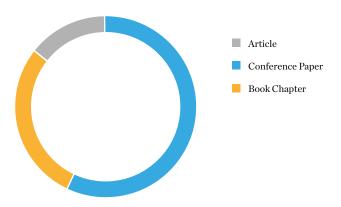
Before starting, it is important to note that when performing the search in Spanish with the gestión de equipos and Pyme, there were no evidenced result on Scopus database. Therefore, it is decided to carry out a first search with the TITLE-ABS-KEY team's management and SME, of which only 8 products are produced between 2006 and 2021, with 2010 and 2016 being the periods with the highest production (2 articles). 63% of these publications are articles, followed by 25% of Conference Paper and 13% of book chapters, as can be seen in the following graphs:

Figure 1 Documents per year teams management and SME



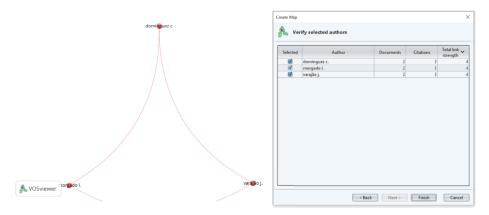
Note. Own elaboration based on Scopus data (2021).

Figure 2
Type of documents management and SME document



Note. Own elaboration based on Scopus data (2021)

Figure 3Co-authorship teams management and SME

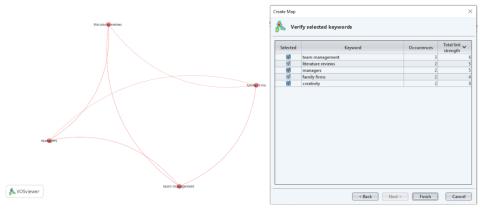


Note. VOS viewer 1.6.16 (2021).

In the previous figure obtained from the VosViewer tool, the relationship between the number of documents produced per author, the number of citations reached, as well as the total strength of the link¹ between these citations is presented. The analysis presents the level of Co-authorship, considering as a unit of analysis the authors, a minimum and maximum number of authors per document of 2 and 25, of which 3 meet the threshold of 29. It can be observed that the three authors cited maintain a level of 3 citations, according to their two documents evidenced in the database, as well as the same total binding force (4).

¹ Links and Total Strength show connections between elements, like co-authorships, in terms of quantity and overall strength (VOSViewer Manual, 2020, p.6).

Figure 4
Co-occurrence by all keywords



Note. VOS viewer 1.6.16

When analyzing the Co-occurrence of the keywords, and when dividing the analysis taking into account, on the one hand *all the keywords* and on the other the *keywords per author*, with a minimum of occurrences of 2; it is observed that in the expression with the highest occurrence and total strength of link is *team management* (3 and 6 respectively), followed by *literature reviews* and *managers* (2 and 5), *family firms* (2 and 4) and *creativity* (2 and 0), as can be seen in the graph below.

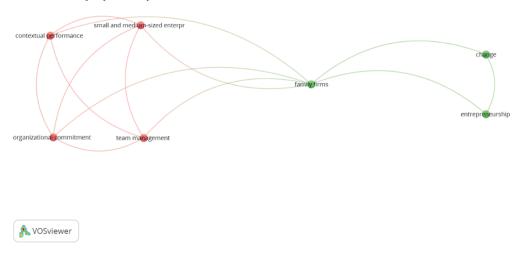
It should be noted that of the 5 items found, the largest set of connected elements consists of 4 items, which can be visualized in the figure 4.

In the second with the unit of analysis keywords per author, considering as a minimum number of occurrences the amount of 1, of which 32 meet the threshold, are the term *family firms* presents the highest number of occurrences and total strength of link (2 and 6 respectively), followed by *business development, entrepreneurialism, performance management, small to medium-sized organizations,* strategic management and *team working* (1 and 5). The rest of the terms are listed with a level of occurrence and total bond strength of 1 and 4 respectively.

In addition to the above, it can be noted that in this new analysis words such as *small and medium-sized enterprise*, *entrepreneurship*, *organizational commitment*, among others, emerge.

It should be noted that the following graph results from the analysis of VOSviewer where of the set of 32 items, the largest group of connected terms is the 7 mentioned in the figure 5.

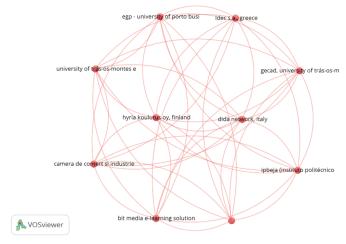
Figure 5
Co-occurrence of keywords by author



Note. VOS viewer 1.6.16

Finally, when performing the co-authorship analysis taking as a unit of analysis the organizations to which the researchers are assigned, there are 26, with a total binding force ranging from 0 to 9, some with 14 citations, others with 6, 2 and 1 citation.

Figure 6Coauthorial by organizations with TITLE-ABS-KEY teams management and SME



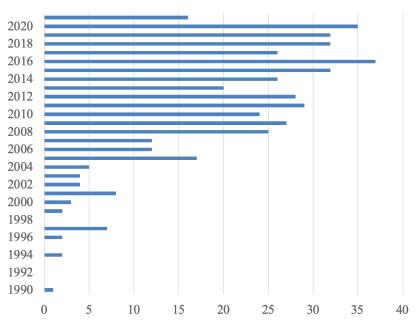
Note. VOS viewer 1.6.16 (2021)

It should be noted that when carrying out a final analysis of the structure of the articles obtained under the TITLE-ABS-KEY teams management and SME, it is observed that most of it corresponds to qualitative studies adopting case studies as approaches; others on the other hand were approached from the type of mixed research. Surveys, questionnaires, interviews, and panel of experts were

used as tools or techniques for collecting information. Within the objectives, the research focused on analyzing both the behavior and performance of the SME teams, seeking to identify strategic factors and competencies that could explain the growth of these companies. On the other hand, it is important to highlight that the keywords allude to performance, evaluation, leadership skills, team performance, SMEs, entrepreneurship, among others, giving greater relevance to performance management within SMEs. Finally, the results reflect the importance of using team management and competencies in SMEs, where these skills contribute to obtaining better results.

However, by selecting separately the TITLE-ABS-KEY teams, management and SME, the result is 468 documents, between 1990 and 2021, of which 5 periods registered production greater than 30 products (2015, 2016, 2018, 2019 and 2020), with 2016 being the period with the highest publications (37 articles), followed by 2020 (35), 2015, 2018 and 2019 (32), the rest of the periods registered a figure of less than 30 products, as shown in the following graph:

Figure 7Documents per year from TITLE-ABS-KEY teams, management, and SME



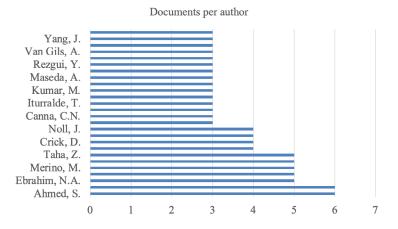
Note. Own elaboration based on Scopus data (2021).

It should be noted that the highest growth presented in publication was registered between 2004 and 2005, in which it reached 240%, followed by the variation between 2000 and 2001 (167%), 2007 and 2008 (108%). On the other hand, the periods where there were no publications on the topics analyzed correspond to the periods 1991, 1992, 1993, 1995 and 1998. The period where a single record was submitted was the year 1990 (1).

The following graph shows the publications made by author, of which the largest products are Ahmed, S. and Ahuja, V. (6), followed by Ebrahim, N.A., Mariño, P., Merino, M., Otero, S., and Taha, Z. (5). The rest of the authors present less than 5 products.

Figure 8

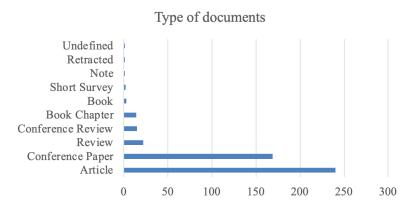
Documents by author from TITLE-ABS-KEY teams, management y SME



Note. Own elaboration based on Scopus data (2021).

According to the type of publications, the following graph shows that between 1990 and 2001, 240 Articles (51.28%), 169 Conference Paper (36.11%), 22 Review (4.70%), 15 Conference Review (3.21%), 14 Book Chapters (2.99%), 3 books (0.64%) and 2 Short Survey (0.43%). The rest of the documents presented only 1 researching product (0.21%).

Figure 9Document type from TITLE-ABS-KEY teams, management, and SME

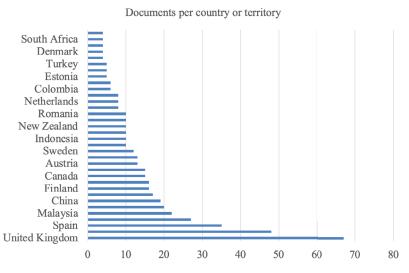


Note. Own elaboration based on Scopus data (2021).

Related to the publications mentioned above, the country with the largest number of researching products is the United Kingdom (67), followed by the United States (48), Spain (35), Germany (27), Malaysia (22), Australia (20). The other countries had less than 20, in these other countries we have

Colombia, placed in position 25 next to Netherland with 6 products. The only country in Latin America that surpasses Colombia is Brazil, which has 8 products and ranks 22nd.

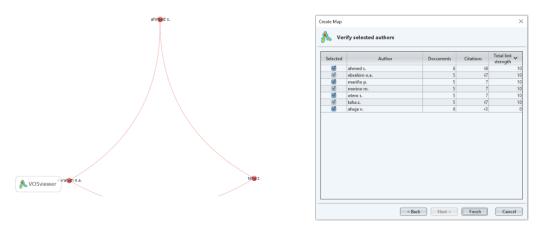
Figure 10
Documents by country or territory based on TITLE-ABS-KEY teams, management, and SME



Note. Own elaboration based on Scopus data (2021).

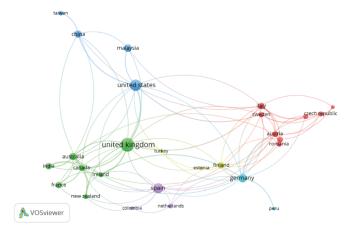
To strengthen the analysis, with the help of VOSviewer, a co-authorship review is drawn up initially considering the authors, stipulating as parameters a minimum of 5 authors per document and a maximum of 25 authors, whose initial analysis shows that, of 1167 authors, only 7 meet the established parameters. The above reveals that Ahmed S., is the author with the highest number of documents, citations and total force of liaison (6, 68 and 10 respectively), followed by Ebrahim N.A. (5, 67 and 10), Mariño P. (5, 7 and 10), Merino M. (5, 7 and 10), Otero S. (5, 7, 10), Taha Z. (5, 67, 10) and Ahuja V. (6, 43 and (0), as presented in the following chart:

Figure 11Co-authorship TITLE-ABS-KEY teams, management y SME



The analysis shown in the following graph, reflects the co-authorship considering a minimum number of 5 documents per country and a maximum of 25, of whose analysis of a total of 71 countries, only 27 meet the parameters established above. Among them, the United Kingdom has the largest number of documents, citations, and total liaison force (67, 1272 and 28 respectively), followed by Germany (27, 442 and 19), the United States (48, 1617 and 18), Austria (13, 244 and 17), Italy (16, 333 and 17), Australia (20, 104 and 13). Colombia ranks 18th with 6 documents, 6 citations and a total liaison force of 5, surpassing Brazil.

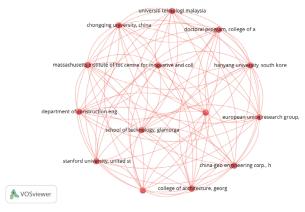
Figure 12
Coauthorial by country from TITLE-ABS-KEY teams, management and SME



Note. VOS viewer 1.6.16

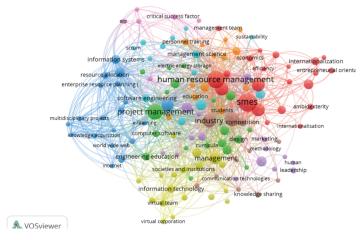
When performing a co-authoring analysis at the level of organizations, as presented in the following graph, considering at least 1 document per organization, for a result of 775 of which only 14 meet the parameters. Likewise, it is found that 14 organizations have a total liaison force equivalent to 13, with a level of 11 citations, among which are the Centre for innovative and collaborative engineering, China -geo engineering corp., among others.

Figure 13Co-authorship by organization based on TITLE-ABS-KEY teams, management and SME



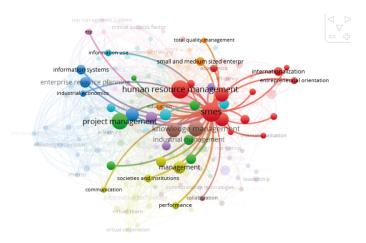
When making a Co-occurrence analysis with a unit of analysis of all keywords (All keywords in VOSviewer), with a minimum number of occurrences of 5 (of 2691 keywords, 136 meet the threshold), as presented in the following graph it can be seen that the terms *human resource management* stand out (66 occurrences and 327 total link strength), *project management* (53 and 278), industry (39 and 208), *knowledge management* (48 and 193), *small and medium enterprise* (34 and 186), *small and medium-sized enterprise* (35 and 175), *SMEs* (74 and 172), among others. The above shows the strong liaison presented by the expressions used in the analysis of this research, as well as the fact that regardless of the number of occurrences presented by the keywords between the different articles analyzed, the total strength of the liaison can be higher or lower, it will depend on the liaison of an element with other elements.

Figure 14
Co-occurrence teams, management and SME for all keywords



Note. VOS viewer 1.6.16

Figure 15 SME Co-occurrence by all keywords

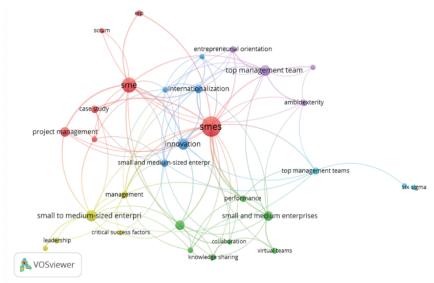


However, when analyzing only the expression "SMEs," it is observed in Figure 15 that it is related to terms such as human resource management, project management, total quality management, *leadership*, performance, communication, among others. This analysis reflects the interrelation between the expression "SMEs" and other key words related to performance and quality.

If only the keywords are reviewed by the author, the result reflected in the following figure (Figure 16) is slightly different, as new terms emerge such as internationalization, top management team, *knowledge* sharing, virtual teams, among other important words that reflect how research has been developed around the terms addressed in the present state of the art. Certainly, terms related to project and team management are associated with the word "SMEs," which is relevant in understanding how teams have evolved.

With that in mind, an *analysis* was conducted with a minimum of 5 occurrences, resulting in 33 keywords meeting the established threshold out of a total of 1216 keywords. From this analysis, it is concluded that the words with the highest frequency are "SME" with 74 occurrences and 49 linkages, followed by "SMEs" (39 and 26), innovation (23 and 20), internationalization (14 and 20), small to medium-sized enterprises (22 and 18), top management team (21 and 18), knowledge management (17 and 15), among other important words.

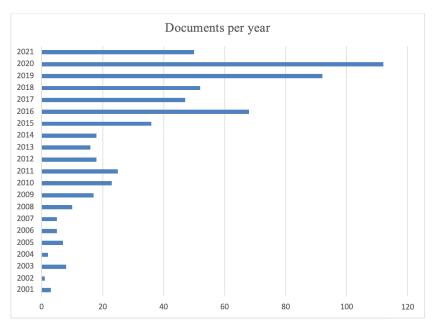
Figure 16
Co-occurrence teams, management and SME by keywords by author in Scopus



It should be noted that of the 33 items that met the threshold, only 31 items could be connected, which are presented in the graph above.

When searching on the Web of Science the expressions (*Team Management or Teams Management*) and (*SMEs or SME*), or *Gestión de equipos en Pyme*, or *Human-resource Management in (SMEs or SME)*, considering all the fields (Todos los campos en español), 615 results are obtained between the years 2001 and 2021, as reflected in the following graph.

Figure 17Documents per year from keywords Team Management, and SMEs



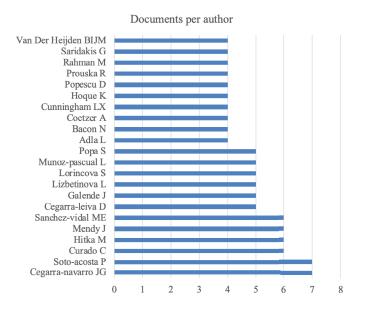
Note. Own elaboration based on Web of ScienceTM data (2021)

From the above, it can be said that the period with the highest number of publications is the year 2020 with 112 products, which represent 18.21% of the sample. The second period with the highest publications is 2019 with 92 products (14.96% of the sample). The rest of the periods were below 90 products, with the years with the lowest number of publications being 2006-2007 (5), 2001 (3), 2004 (2) and 2001 (1). The highest percentage of growth was evidenced between 2002 and 2003 (700%), followed by the interval 2004 and 2005 (250%).

Next are the most representative authors among which Cegarra-navarro JG and Soto-acosta P stand out, each with 7 products, followed by Curado C., Hitka M., Mendy J., and Sanchez-vidal ME (6), Cegarra-leiva D., Galende J., Lizbetinova L., Lorincova S., Munoz-pascual L., and Popa S (5). The rest of the authors contribute less than 5 products. This can be presented in the following graph.

It should be noted that according to the information provided by the Web of Science, 95.28% of the published researching products represent articles, followed by a minority of review articles (3.902%), editorial material (0.488%) and book reviews (0.325%).

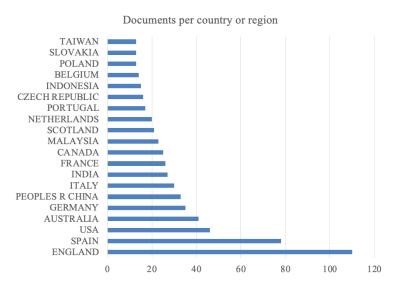
Figure 18
Documents per author from keywords Team Management or Teams Management



Note. Own elaboration based on Web of ScienceTM (2021)

Regarding the countries which contributed with researching products between 2001 and 2021, England leads with 110 publications, which represent 17.88% of the sample, followed by Spain (78), USA (46), Australia (41), Germany (35), China (33) and Italy (30). The rest of the countries or regions presented less than 30 products, as shown in the following graph:

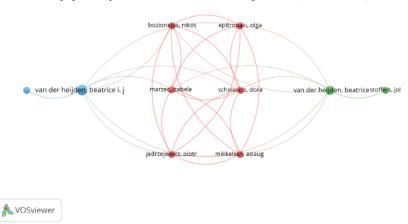
Figure 19Documents per country or region from keywords Team Management or Teams Management)
and (SMEs or SME), or Gestión de equipos en Pyme, or Human-resource Management in (SMEs or SME)



Note. Own elaboration based on Web of ScienceTM (2021)

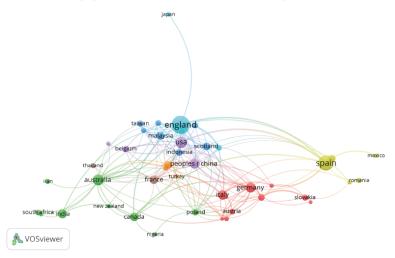
When transferring the analysis of the products found in the Web of Science, using the help of VOSviewer 1.6.16, including as parameters a minimum of 2 documents per author and a maximum of 25, it is found that, of 1590 authors, 142 meet the established parameters, but only 10 are connected to each other. The most representative authors of this group are Hitka, Milos with 6 products, 102 citations and 18 total link strength, followed by Lizbetinova, Lenka (5, 60 and 16 respectively), Lorincova, Silvia (5, 102, 16), Bozionelos, Nikos; Epitropaki, Olga; Jedrzejowicz, Piotr; Marzec, Izabela; Mikkelsen, Aslaug; and Scholars, Dora, all with 2 documents, 87 citations and 12 in total liaison force. The above can be seen in greater detail in the following graph.

Figure 20
Coauthorial per author from keywords Team Management or Teams Management) and (SMEs or SME), or Gestión de equipos en Pyme, or Human-resource Management in (SMEs or SME) en Web of Science



Note. VOS viewer 1.6.16

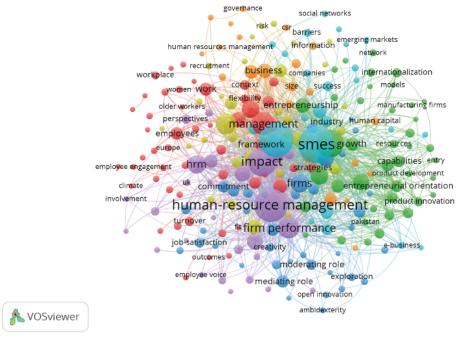
Figure 21
Coauthorial per country from keywords Team Management or Teams Management) and (SMEs or SME), or Gestión de equipos en Pyme, or Human-resource Management in (SMEs or SME) en Web of Science.



The same procedure executed for the authors was executed by country, for whose analysis a minimum of 5 products per country is considered, resulting in the fact that out of 84 countries 43 meet the parameters. From this analysis it is obtained that the country with the highest number of documents (110), citations (2384) and total liaison force (76) is England, followed by Australia (41, 649 and 36 respectively), USA (46, 1337 and 36), Germany (35, 730 and 33), Spain (78, 1870 and 33), among other countries. It should be noted that in this list the only country in South America that appears is Ecuador, which is in the last location with 5 documents and 1 citation. This can be seen in the previous figure.

The following graph shows the analysis of co-occurrence considering all the keywords, taking as a parameter at least 5 occurrences, obtaining that of 2601 keywords, only 235 meet the established parameters. Among this large group of terms, SMEs stand out as the most significant with 209 occurrences and 1335 total link strength, followed by Human-resource management (175 and 1296 respectively), Performance (184 and 1244), Impact (131 and 991), among other keywords. It should be noted that the term SME appears in both singular and plural, as well as in acronym or in its extended expression.

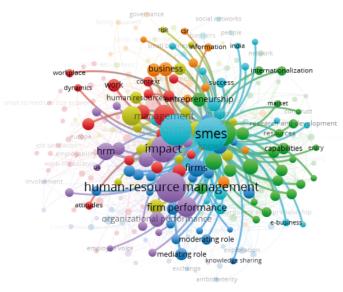
Figure 22
Cooccurrence for all the from keywords Team Management or Teams Management) and (SMEs or SME), or Gestión de equipos en Pyme, or Human-resource Management in (SMEs or SME) en Web of Science



Note. VOS viewer 1.6.16

Now, when selecting only the term SMEs you can see in the following graph the connection it presents with terms such as human-resource management, impact, firm performance, entrepreneurship, business, success, among other terms, reflecting the relevance of management and development processes in the performance of SMEs.

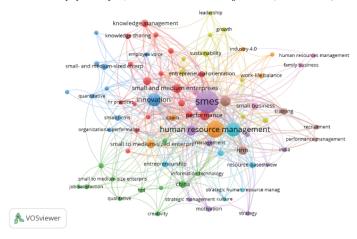
Figure 23
Cooccurrence for all the from keywords Team Management or Teams Management) and (SMEs or SME), or Gestión de equipos en Pyme, or Human-resource Management in (SMEs or SME) en Web of Science



Note. VOS viewer 1.6.16

When performing the analysis of cooccurrence of the keywords by author, taking into account as parameters a minimum of 5 keywords, it is obtained that of 1738 keywords, 77 comply with the parameters of cooccurrence, standing out as the most significant term *SMEs* with 129 occurrences and 156 total strength of the link, followed by *Human-resource management* (69 and 105 respectively), *Innovation* (42 and 77), *SME* (49 and 63), *among other keywords*. It should be noted that the term *SME* appears in both singular and plural, as well as in acronym or in its extended expression. By selecting only, the term SMEs can be noticed that the linked terms are *human resource management*, *performance, management, innovation, talent management, Innovation, and Knowledge management*, among other relevant terms. This can be seen in the following graph.

Figure 24
Co-occurrence keywords by author from keywords (Team Management or Teams Management) and (SMEs or SME), or Gestión de equipos en Pyme, or Human-resource Management in (SMEs or SME) en Web of Science



52% of the reviewed articles applied a qualitative methodological research approach while the remaining 48% used a quantitative methodology.

It can be said that some management functions are connected to the performance of employees and teams, while others are not, which, when considered together, influence the performance of the team and the organization from the perspective of their sustainable strategic competencies (Cizmaș et al., 2020).

Other components with significant influences on Research and Development (R&D) operations are the personal experiences of team members, such as task-specific experiences as well as cultural (international) experiences (Arslan et al., 2021).

Other important aspects that can contribute technically and emotionally to team facilitators and coordinators and enable SMEs to build high-performing innovation teams, regardless of the limitation of their limited financial and human resources, are training programs (Martinez et al., 2020).

However, not only do training contribute to human resource management, but there are also fundamental variables such as granting gifts (Adla et al., 2020), creating personal relationships and developing open communication between owners-managers and employees, and between employees themselves (Castrogiovanni et al., 2011). Consistent with the above, the use of human resources policies and practices positively improves the competitive advantage and performance of small businesses (Sheehan, 2014; Lai et al., 2017). In essence, human resource management is an important impetus in the creation of management systems aims to improve organizational performance (Sardi et al., 2020).

The above aspects contribute to promoting a more appropriate work environment to carry out other resource management practices that stimulate entrepreneurial behaviors.

However, we cannot forget the leadership that women have developed in organizations, with which SMEs can improve their sustainability through a management team with gender balance (Graafland, 2020)

Conclusions

The constant changes evidenced worldwide, result of economic crises, business fraud, unemployment, poverty and the most recent caused by the COVID-19 pandemic, affect thousands of these, has triggered the interest to investigate about the thematic, which is why in the analyses carried out a greater growth of publications for that period is evident.

SMEs have been the subject of various investigations that seek answers, proposals, and strategies to help improve the management of their teams and obtain better results. This is how the management of teams or human resources is a topic that has been investigated with great interest in large

companies, being little addressed in SMEs, making it difficult to explain the factors that can affect the growth and performance of these companies. However, those investigations that have emerged and tried to provide an approach to the reality of SMEs, manage to conclude that the strategic management of human resources, manages to add value to the company. In this way, activities designed in isolation from team management tend to lack congruence in most companies. This is due in many cases to the ignorance of the business owners or employee, whose activities usually derive from informal processes guided by the thinking of the owner, but not by the participation of the team or human talent.

It is here at this point, where human resources management becomes important, which, through a conscious strategic orientation on the part of the entire team, manages to ensure business management.

In summary, there may be several variables or factors that provide SMEs with the appropriate way to manage their teams to achieve better results.

To continue contributing to this research topic, aims to complement the current research with analysis of new documents that attest to the results found an analysis of SMEs and how team management contributes to improving the achievement of objectives for these companies.

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