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Bibliometric Analysis Regarding Knowledge Strategies in Intelligence Structures

Nicolae Alexandru BUDEANU*
National University of Political Studies and Public Administration, Bucharest, Romania
**Corresponding author, budeanu.alexandru6@gmail.com*

Abstract. *This paper aims to present a literature review focusing the linkages between the knowledge strategies domain and intelligence structures area. Considering the fact that knowledge is one of the most important strategic resources of an organization and the fact that intelligence structures play a key role in the national security field, the possibility of implementing the knowledge strategies concepts in the intelligence field should be researched accordingly. The methodology used for this research is the bibliometric analysis conducted using the specialized software VOSViewer, based on the co-occurrence between certain words and expressions from article title, abstracts and keywords. The databases needed for this research were retrieved from Scopus core collection, using the following expressions: "knowledge strategies", "knowledge management – knowledge strategies", "intelligence organizations", "intelligence structures", "intelligence organizations – knowledge", "knowledge – intelligence structures", "knowledge strategies – intelligence", "knowledge management – knowledge strategies – intelligence" and "knowledge management – intelligence organizations". The result of these bibliometric analyses demonstrates that, based on the publications indexed in Scopus core collection, there is no research published regarding the opportunity and possibility of implementing knowledge strategies concepts in the intelligence structure vision. The contribution of this research constitutes the fact that this is the first bibliometric analysis of the literature concerning the possbile connections between knowledge strategies and intelligence structures.*

Keywords: knowledge strategies, knowledge management, knowledge dynamics, intelligence, intelligence structures, intelligence organizations, bibliometric analysis.

Introduction

Knowledge that resides and is created within an organization is commonly considered to be the main reason of the competitive advantage gained and sustained by that firm. (Porter, 1985; Nonaka, 1994; Grant, 1996; Spender, 1996; Zack, 1999; Nonaka & Toyama, 2003; Bratianu, 2011, 2022; Bratianu & Lefter, 2011; Bratianu & Leon, 2015; Bratianu & Bejinaru, 2019a, 2019b; Bratianu *et al.*, 2021). This knowledge can be decomposed in two parts: explicit knowledge and tacit knowledge, forming the explicit-tacit dyad (Nonaka 1994; Nonaka & Takeuchi, 1995). Explicit knowledge is characterized by the possibility to be transferred through symbolic language, like words and numbers, while tacit knowledge represents the emotions, values and experience a person has.

Also, in the theory of knowledge fields, this explicit-tacit dyad is developed in a more complex view, including the rational knowledge, emotional knowledge and spiritual knowledge (Bratianu, 2011, 2019, 2022; Bratianu & Bejinaru, 2019a, 2019b). Rational knowledge refers to that knowledge that can be expressed by natural or symbolic knowledge, making it the equivalent of the explicit knowledge (Bratianu, 2011, 2022; Bratianu & Bejinaru, 2019a, 2019b; Bratianu *et al.*, 2020). Emotional knowledge is composed by our feelings and emotions, while spiritual knowledge refers to our values and meanings that guide our lives (Bratianu, 2011, 2022; Bratianu

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& Bejinaru, 2019a, 2019b; Bratianu *et al.*, 2020). Therefore, emotional knowledge and spiritual knowledge form the tacit knowledge from the explicit-tacit dyad.

Knowledge dynamics represent the variation of knowledge inside the organization boundaries, given a specific context, time and space and at individual or organizational level (Bratianu *et al.*, 2020). Understanding the knowledge dynamics within the organization is one of the most important attributes for decision-making process. Even if, in our society, managers are thought to take decisions based mostly on rational knowledge (Bratianu & Bejinaru, 2019a), the importance of knowledge management, which also requires managing the emotional and spiritual knowledge, is widely accepted. Given this, managers motivate their employees by using their emotional knowledge and they are building their organizational culture based on the shared values, which come from their spiritual knowledge (Bratianu & Bejinaru, 2019a).

Although it cannot be defined by an universal accepted definition, we can think that ”knowledge management is a complex process that integrates knowledge creation and acquisition; knowledge sharing and transfer; knowledge transformation, storage, and retrieval; knowledge risks; and knowledge application in creating products and services” (Bratianu, 2022, p. 1).

Therefore, knowledge management represents the activities that need to be taken in order to achieve the vision and goals set by an organization through its knowledge strategy. According to Bratianu & Bolisani (2018, p. 105), ”a knowledge strategy refers to a company’s general vision of its knowledge as an economic resource, its importance for the business and the competitive environment, the organizational attitude towards the sources of knowledge, and the methods to manage them.”

Intelligence structures have a key role in every nation around the globe, their main attribute being to identify, prevent and overcome all types of risks, vulnerabilities and threats that could affect the national security. In order to achieve its goals, intelligence structures cooperate with all the organizations that exist within a state, informing the decision-making managers who could act in the meaning of prevent or overcome the risks, vulnerabilities and threats towards national security.

Although its methods and means of obtaining information are classified, it is widely known that intelligence structures use high-tech capabilities, whose use require rational knowledge. On the other hand, intelligence structures obtain information from human sources, which are recruited based on their values and motivation, using mainly emotional and spiritual knowledge. Also, intelligence structures employees are highly motivated and share a very specific set of values and beliefs, embodied in the organizational culture. This being said, an intelligence structure manager needs to understand the knowledge dynamics within the organization and to manage its knowledge in its best way possible.

The motivation for this paper comes from the need to identify the possibility and opportunity of implementing a knowledge strategy in an intelligence structure activity. To achieve this goal, this research must identify if there is a knowledge gap between knowledge studies and intelligence area publications. Given this context, I formulate the next research question:

RQ: If there is a knowledge gap between knowledge studies and intelligence area literature, how can it be filled with research concerning the implementing of knowledge strategies in those organizations vision?

For this, the research presents a semantic literature review and a bibliometric analysis using VOSviewer software. After this introduction, the paper will present a literature review, a methodology presentation, results and discussion and the conclusions.

Literature review

Knowledge

Although Nonaka and Takeuchi (1995, p. 87) offered the most used definition of knowledge as a "justified true belief", the recent research has showed that knowledge cannot be defined by a single and universal definition. Being an intangible asset, it cannot be defined by using the classic methods used in any metric systems. Therefore, it is needed to understand this intangible concept by using metaphors, mapping characteristics from the source domain to the target domain (Andriessen, 2006; Bratianu & Andriessen, 2008; Bratianu, 2015; Bratianu & Bolisani, 2018).

The first metaphor used to define knowledge was the illustration of an iceberg, the visible part being considered the explicit knowledge, while the hidden part of the iceberg representing the tacit knowledge (Nonaka & Takeuchi, 1995).

Later, Andriessen (2006) presented the metaphors used to describe knowledge, concluding that these metaphors could be divided in six categories, as follows: knowledge as something physical, knowledge as a wave, knowledge as a living organism, knowledge as thoughts and feelings, knowledge as a process and knowledge as a structure.

Building on the fact that knowledge cannot be described as a tangible asset, Bratianu and Andriessen (2008) first used the knowledge as energy metaphor, stating that knowledge is a field. Starting from this, Bratianu (2011) changes the newtonian paradigm in understanding the knowledge into a paradigm based on thermodynamics.

Based on the metaphor of knowledge as energy, Bratianu and Bejinaru (2019a) developed the theory of knowledge fields, in which knowledge is defined by three fundamental fields, respectively rational knowledge, emotional knowledge and spiritual knowledge.

According to the theory of knowledge fields, rational knowledge is the correspondent of the explicit knowledge from the nonakian dyad, being the result of our mental process and representing the type of knowledge that can be expressed by natural or symbolic knowledge (Bratianu & Bejinaru, 2019a).

The tacit knowledge was decomposed in two knowledge fields: emotional and spiritual. Emotional knowledge represents the emotions and feelings, which are not expressed by natural and symbolic language, but by our body language. Spiritual knowledge is formed by our values, meanings and beliefs that guide our lives and influence every decision we take (Bratianu & Bejinaru, 2019a).

Knowledge dynamics

The variation and changes of knowledge inside an organization represents the knowledge dynamics. The most famous knowledge dynamics model is SECI – Socialization, Externalization, Combination and Internalization (Nonaka 1994; Nonaka & Takeuchi, 1995). According to this knowledge dynamics model, the explicit knowledge is transformed into tacit knowledge and, also, tacit knowledge is transformed into explicit knowledge, in a cyclic process that happen through different layers and levels of the organization.

Based on the theory of knowledge fields, Bratianu and Bejinaru (2019a) developed a new model of knowledge dynamics, stating that the three types of knowledge, respectively rational, emotional and spiritual, can be transformed similar to the transformation that occur between different types of energy (mechanical, electrical and thermal). In this view, "the transformations between emotional knowledge and rational knowledge are governed by experience and expertise. The transformations between emotional knowledge and spiritual knowledge are governed by

culture, and those between rational knowledge and spiritual knowledge by wisdom" (Bratianu & Bejinaru, 2019a, p. 8).

Knowledge strategies

As knowledge has started to be seen as one of the most important strategic resources (Zack, 1999), the need to implement strategies in order to manage the knowledge within an organization became crucial in order to achieve and maintain a competitive advantage (Porter, 1985; Zack, 1999; Bratianu, 2022).

Bolisani and Bratianu (2017) presented an integrated approach to knowledge strategy planning, discussing the generic knowledge strategies, respectively knowledge exploitation strategy, knowledge acquisition strategy, knowledge sharing strategy and knowledge exploration strategy, as well as the rational and emergent view of knowledge strategy planning.

Continuing their work, Bratianu and Bolisani (2018) addressed the deliberate/rational and emergent knowledge strategy formulation issue, stating that " the deliberate or rational approach to strategy formulation planning is an explicit and rational formulation of goals, plans, and means that originates from precise intentions of the company, while an emergent approach refers to a situation where a strategy, rather than being defined in advance, can be better seen as an "ex-post" rationalization of a company's behavior" (Bratianu & Bolisani, 2018, p. 129). In conclusion to their research, companies should develop an integrated approach to their knowledge strategy, both deliberate and emergent.

Methodology

This research presents a bibliometric analysis of the literature concerning the state of knowledge studies in the intelligence structures area, using the specialized software for visualization of similarities VOSviewer.

This research is based on the co-occurrence investigation procedure, which aims to find similarities and connections between article title, abstracts and keywords. The co-occurrence investigation procedure could indicate a connection between knowledge studies and intelligence structures and the state of research in this domain.

The data used for conducting this research was retrieved, in 23 January 2023, from Scopus core collection, one of the world's largest scientific abstract and citation database. It is important to note that the search was conducted within "Article title, Abstract, Keywords", using all the time range from Scopus core collection. Also, the search was conducted within "all types" of documents and "all languages".

The searching in Scopus core collection was made using the following expressions: "knowledge strategies", "knowledge management – knowledge strategies", "intelligence organizations", "intelligence structures", "intelligence organizations – knowledge", "knowledge – intelligence structures", "knowledge strategies – intelligence", "knowledge management – knowledge strategies – intelligence" and "knowledge management – intelligence organizations" (see Table 1). For the following expressions the search engine from Scopus core collection did not display any data: "knowledge management – intelligence structures", "knowledge strategies – intelligence structures", "knowledge strategies – intelligence organizations", "knowledge management – knowledge strategies – intelligence structures", "knowledge management – knowledge strategies – intelligence organizations".

This analysis based on the search engine of Scopus shows that the two domains, respectively knowledge strategies and intelligence structures, were not researched together and

there were not published any articles regarding the implementation of knowledge strategies in intelligence structures vision.

Table 1. Expressions used to retrieve database from Scopus

Expression	Total number of publications	The first year of appearance	Number after 01 January 2022 publications and percentage within all years
”knowledge strategies”	674	1982	48 / 7,12%
”knowledge management – knowledge strategies”	243	1997	12 / 4,93%
”intelligence organizations”	293	1938	25 / 8,53%
”intelligence structures”	248	1963	20 / 8,06%
”intelligence organizations – knowledge”	31	2000	3 / 9,67%
”knowledge – intelligence structures”	29	1973	2 / 6,89%
”knowledge strategies – intelligence”	30	1987	2 / 6,67%
”knowledge management – knowledge strategies – intelligence”	11	2002	0 / 0%
”knowledge management – intelligence organizations”	4	2010	0 / 0%

Source: Authors’ own research.

Although knowledge strategies and intelligence structures domains are very interesting and fascinating, this research will focus on the inter-relationship between them, and will not focus these domains separately. Therefore, this research will continue by analyzing the database retrieved using the following expressions: ”intelligence organizations – knowledge”, ”knowledge – intelligence structures”, ”knowledge strategies – intelligence”, ”knowledge management – knowledge strategies – intelligence” and ”knowledge management – intelligence organizations”.

As the search engine from Scopus displayed all types of publications for the indicated expressions, the table below shows the number and the percentage of different document types (see Table 2).

Table 2. Types of documents from Scopus database

Expression	Number of articles/percentage within all publications	Number of conference papers/percentage within all publications	Number of other types of documents/percentage within all publications
”intelligence organizations – knowledge”	18 / 58,06%	7 / 22,58%	6 / 19,36%
”knowledge – intelligence structures”	21 / 72,42%	6 / 20,69%	2 / 6,89%
”knowledge strategies – intelligence”	20 / 66,67%	6 / 20%	4 / 13,33%
”knowledge management – knowledge strategies – intelligence”	6 / 54,55%	3 / 27,27%	2 / 18,18%
”knowledge management – intelligence organizations”	2 / 50%	1 / 25%	1 / 25%

Source: Authors’ own research.

The main language used in the publications retrieved from Scopus database is English (more than 90% of publications), while the most relevant research domains for ”intelligence

organizations – knowledge" is Social Sciences (17 publications), for "knowledge – intelligence structures" is "Psychology" (8 publications), for "knowledge strategies – intelligence" is "Computer Science" (9 publications), for "knowledge management – knowledge strategies – intelligence" is "Decision sciences" (5 publications) and for "knowledge management – intelligence organizations" are "Bussiness, Management and Accounting", "Computer Science", "Decision Sciences" and "Engineering" (2 publications each).

The most influent author for "intelligence organizations – knowledge" is Branko Souček, for "knowledge – intelligence structures" is André Beauducel, for "knowledge strategies – intelligence" and "knowledge management – knowledge strategies – intelligence" are Helen N. Rothberg and Scott G. Erickson, while for "knowledge management – intelligence organizations" are 10 co-authors with 1 publication each.

After the search was conducted using the credentials presented above, the databases were exported from Scopus core collection under the ".csv" extension, including the "Citation information", "Bibliographical information", "Abstract & keywords", "Funding details" and "Other information". These raw data was processed and analyzed using VOSviewer in order to identify the co-occurrence of certain keywords within the chosen domains and to generate de map based on the exported databases.

Results and discussions

The purpose of this research is to identify if there were published any papers regarding the implementation of knowledge strategies in intelligence structures vision and, also, the links between knowledge studies and intelligence organizations.

Given this motivation, this research analyses the five expressions that generated results in Scopus core collection search engine, respectively "intelligence organizations – knowledge", "knowledge – intelligence structures", "knowledge strategies – intelligence", "knowledge management – knowledge strategies – intelligence" and "knowledge management – intelligence organizations", in order to identify any co-occurence between this publications. The keywords co-occurrence shows the main interest fields in this research area.

The graphics showing these co-occurrences are also generated using VOSviewer. The words and links between them are shown in different colors, based on how closely related are one to another. The words and links with the same color are grouped into a cluster. The link strength is generated based on the number of links between keywords. Also, the keywords that are placed closer have a stronger relationship between them.

Using the 31 publications related to "intelligence organizations – knowledge" expression, VOSviewer generated 258 keywords, while only 12 met the threshold of minimum 3 occurences, placing them in two clusters (Figure 1).

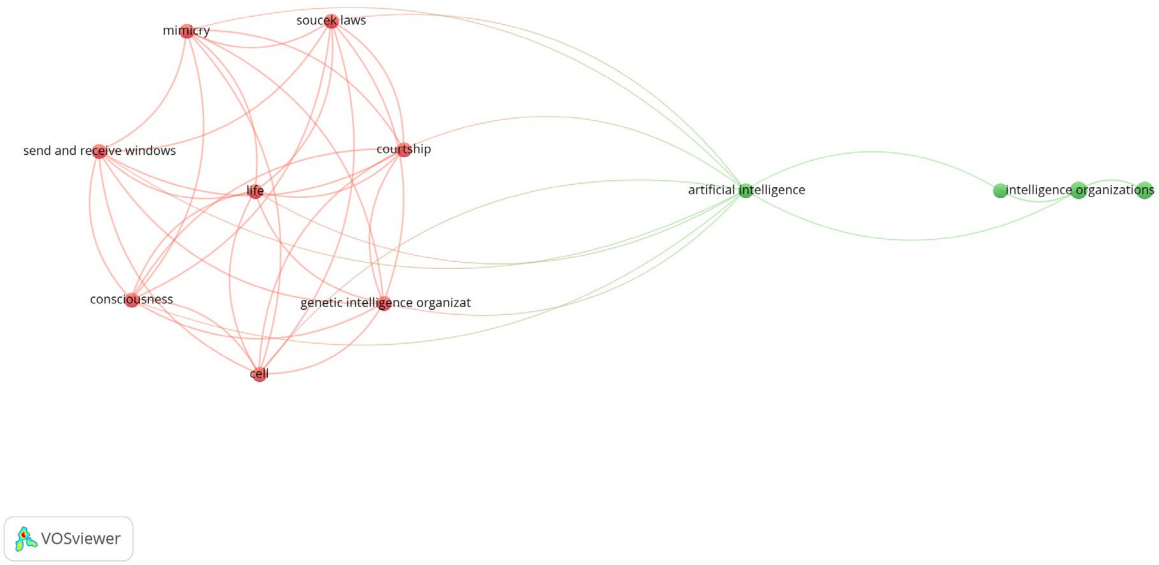


Figure 1. Keywords co-occurrence and the relationship between them for ”intelligence organizations – knowledge” expression with minimum 3 occurrences – VOSviewer

Source: Authors' own research.

The red cluster generated by VOSviewer is based on keywords from publications within Social Sciences studies, all its eight keywords, respectively ”life”, ”courtship”, ”soucek laws”, ”mimicry”, ”send and receive windows”, ”consciousness”, ”cell” and ”genetic intelligence organization” being linked with ”artificial intelligence”, which is placed in the green cluster. In the green cluster, VOSviewer placed the following keywords: ”artificial intelligence”, ”intelligence organizations”, ”knowledge management” and ”big data”. The relevant information retrieved from the green cluster is presented in Table 3.

Table 3. Green cluster from ”intelligence organizations – knowledge” expression analysis

Keywords	Links	Total link strength	Occurences
Artificial intelligence	10	10	3
Intelligence organizations	3	5	4
Knwoledge management	1	2	4
Big data	2	3	3

Source: Authors' own research.

Analyzing Figure 1 and Table 3 it can be seen that ”knowledge management” is only linked with ”intelligence organizations”, while ”intelligence organizations” is linked with ”artificial intelligence” and ”big data”. Although ”knowledge management” is placed close to ”intelligence organizations”, the linkages between the last one and ”artificial intelligence” and ”big data” shows that these papers does not cover the integration of knowledge management or knowledge strategies in intelligence structures activity, but rather refer to scientific researches.

Using the database retrieved from Scopus core collection for ”knowledge – intelligence structures” expression, which includes 29 publications, were obtained 275 keywords, with only 10 meeting the threshold of minimum 3 occurrences. VOSviewer place this keywords in a single cluster, as it can be seen in Figure 2.

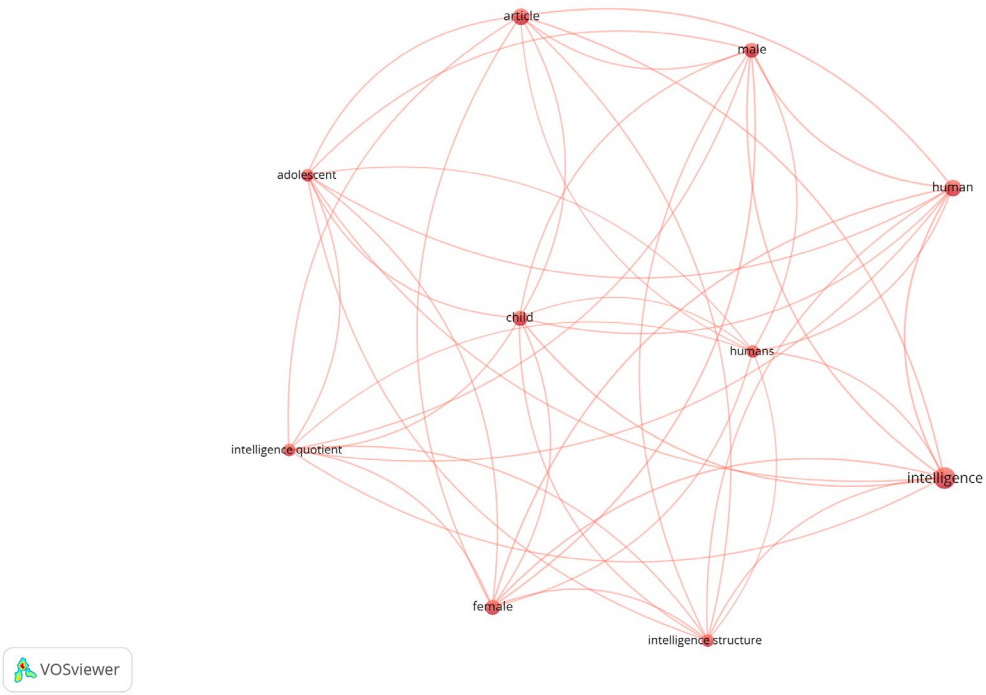


Figure 2. Keywords co-occurrence and the relationship between them for ”knowledge – intelligence structures” expression with minimum 3 occurrences– VOSviewer

Source: Authors' own research.

The publications containing the keywords from this red cluster ”knowledge – intelligence structures” are from ”Psychology” studies. This conclusion comes from the fact that all the keywords, respectively ”humans”, ”child”, ”human”, ”intelligence”, ”intelligence structure”, ”female”, ”intelligence quotient”, ”adolescent”, ”article” and ”male” are connected to one another. Although ”intelligence” and ”intelligence structure” appear in this cluster, the linkage between the other expressions demonstrate that these keywords do not refer to intelligence organizations as law-enforcement structures, but rather to characteristics of human beings. In conclusion, these publications do not cover the knowledge studies in the intelligence organizations.

Given this fact, the threshold of minimum 3 occurrences was modified to only 2 minimun occurrences. Doing so, from the total of 275 keywords were obtained 21 keywords meeting the specified requirements, placed in 5 clusters (Figure 3).

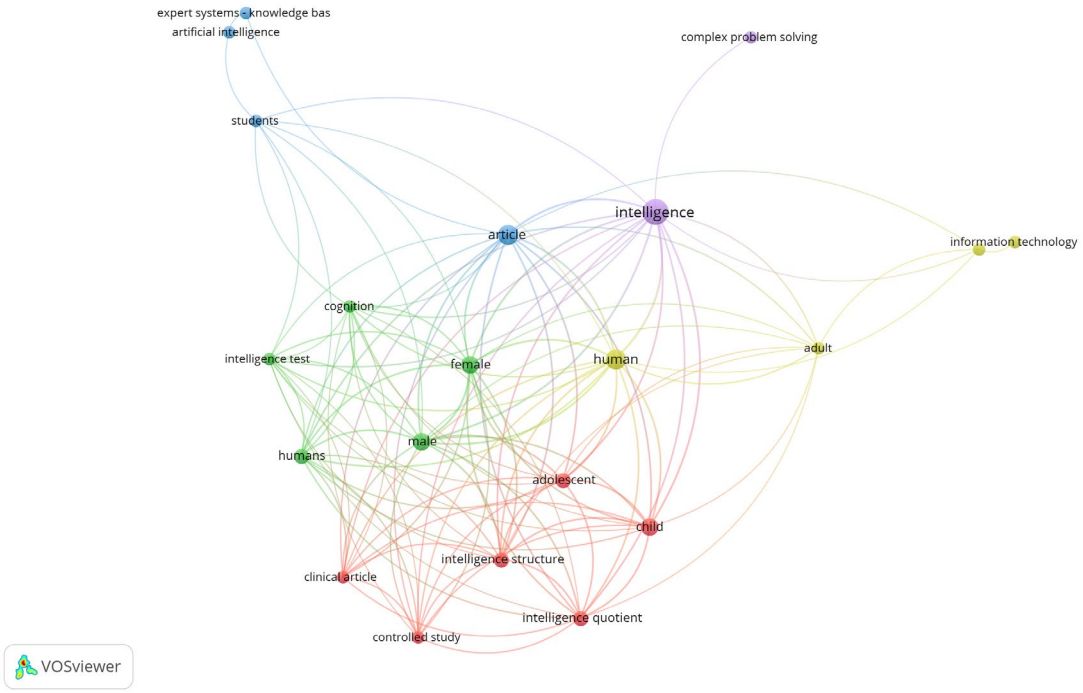


Figure 3. Keywords co-occurrence and the relationship between them for ”knowledge – intelligence structures” expression with minimum 2 occurrences– VOSviewer

Source: Authors' own research.

The red cluster, in which is placed ”intelligence structure” keyword, is based on keywords from publications within ”Psychology” domain, given the fact that it also contains the following expressions: ”adolescent”, ”child”, ”intelligence quotient”, ”controlled study” and ”clinical article”. It is also important to mention that ”intelligence structure” is linked to other keywords from the rest of the clusters, respectively with ”female”, ”male”, ”cognition”, ”intelligence test” and ”humans” from the green cluster, ”article” from the blue cluster, ”intelligence” from the purple cluster, ”human” and ”adult” from the yellow cluster.

The other two keyword that present interest for this research are ”intelligence” and ”knowledge”.”Intelligence” is placed in the yellow cluster, among the ”complex problem solving” expression, and is linked with the following keywords: ”knowledge”, ”adult” and ”human” from the yellow cluster, ”child”, ”intelligent quotient”, ”adolescent”, ”intelligence structure”, ”controlled study” and ”clinical article” from the red cluster, ”male”, ”female”, ”humans”, ”intelligence test” and ”cognition” from the green cluster, ”article” and ”students” from the blue cluster. ”Knowledge” is placed, among ”adult”, ”human” and ”information technology”, in the yellow cluster, being also linked with the following keywords: ”intelligence” from the purple cluster and ”article” from the blue cluster. In Table 4 is presented the relevant information for the ”intelligence structure”, ”intelligence” and ”knowledge” keywords.

Table 4. ”Intelligence structure”, ”intelligence” and ”knowledge” keywords from ”knowledge – intelligence structures” expression analysis

Keywords	Links	Total link strength	Occurences
Intelligence structure	14	33	3
Intelligence	17	46	8
Knowledge	5	5	2

Source: Authors’ own research.

Although ”intelligence structure”, ”intelligence” and ”knowledge” appear in this analysis, considering Figure 3 and Table 4 it can be concluded that their links with other keywords specific to ”Psychology” studies demonstrate that this expressions represent specific terminology for this type of research. Therefore, this analysis shows that there were not published any studies concerning the implementation of knowledge strategies in intelligence structures.

Going further, this research continues with the analysis of ”knowledge strategies – intelligence” database, which included 30 publications. From the total of 219 keywords, only 5 met the minimum requirement of 3 occurrences, respectively ”knowledge management”, ”competitive intelligence”, ”knowledge engineering”, ”artificial intelligence” and ”cultural intelligence”. Given this circumstance, the research was extended to the minimum threshold of 2 occurrences, generating 21 keywords from the total of 219, that were divided in 5 clusters (Figure 4).

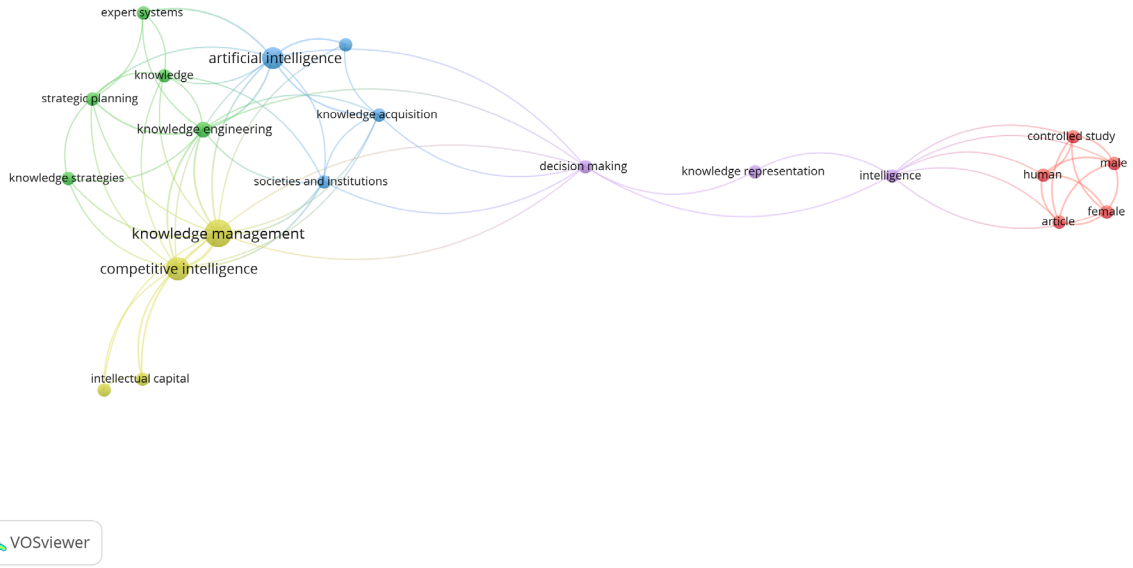


Figure 4. Keywords co-occurrence and the relationship between them for ”knowledge strategies – intelligence” expression with minimum 2 occurrences– VOSviewer

Source: Authors’ own research.

As it can be seen, ”knowledge strategies” keyword is place in the green cluster, along with ”strategic planning”, ”expert systems”, ”knowledge” and ”knowledge engineering”. Beside this fact, ”knowledge strategies” is linked with ”knowledge management” and ”competitive intelligence” from the yellow cluster, which also includes ”strategy” and ”intellectual capital” too. Although there is a strong linkage between the two clusters, both representing studies conducted in the knowledge fields, the ”intelligence” keyword is placed in the purple cluster,

alongside with ”decision making” and ”knowledge ”representation”. Furthermore, the ”intelligence” keyword is linked with all five expressions from the red cluster, which represents the ”Psychology” domain, respectively ”controlled study”, ”human”, ”male”, ”article” and ”female”. In Table 5 is presented the relevant data based on the analysis of this database, regarding the ”knowledge strategies”, ”knowledge management” and ”intelligence”.

Table 5. ”Knowledge strategies”, ”knowledge management” and ”intelligence” keywords from ”knowledge strategies – intelligence” expression analysis

Keywords	Links	Total link strength	Occurences
Knowledge strategies	4	4	2
Knowledge management	12	21	8
Intelligence	7	7	2

Source: Authors’ own research.

Even if ”knowledge strategies” and ”knowledge management” are linked and related in studies regarding the knowledge domain, by analyzing Figure 4 and Table 5 comes the conclusion that ”intelligence” is not linked with these two keywords. Also, the fact that ”intelligence” is linked with all the keywords from the red cluster demonstrate that this term was used to describe the ability of a human being, and is not referring to the intelligence organizations.

By using the database related to ”knowledge management – knowledge strategies – intelligence” expression, VOSviewer generated 70 keywords, with 6 of them meeting the threshold for minimum 2 occurrences (the maximum number of occurrences possbile in the software for this database), distributed in 2 clusters.

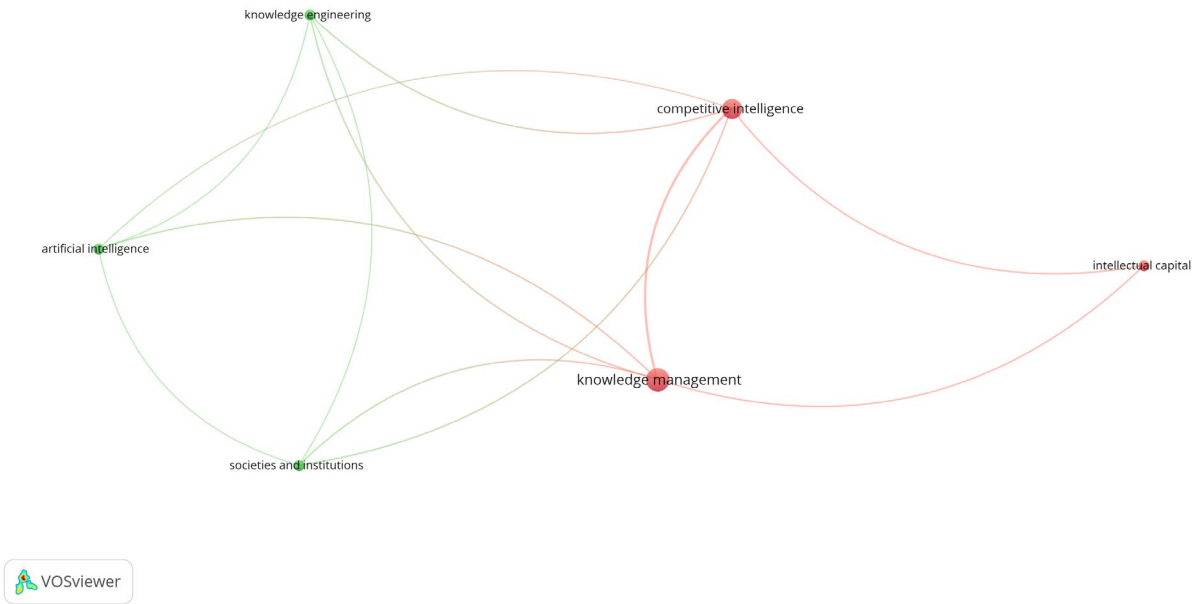


Figure 5. Keywords co-occurrence and the relationship between them for ”knowledge management - knowledge strategies – intelligence” expression with minimum 2 occurrences– VOSviewer

Source: Authors’ own research.

The red cluster was formed with ”competitive intelligence”, ”intellectual capital” and ”knowledge management” expressions, while the green cluster contained ”knowledge engineering”, ”artificial intelligence” and ”societies and institutions” keywords.

As it can be seen by analyzing Figure 5, the two clusters represent researches from the knowledge management domain (red cluster) and science/innovation (green cluster). Therefore, in this database analysis, it cannot be found a possible link between these publications and intelligence organizations.

The last database used in this research contained 4 publications based on ”knowledge management – intelligence organizations” search on Scopus core collection. Using this database, VOSviewer generated 54 keywords, but the software could not generate any research based on co-occurrence of minimum 2 times or above. Therefore, the graphics were obtained by using all 54 keywords, which were divided in 4 clusters.

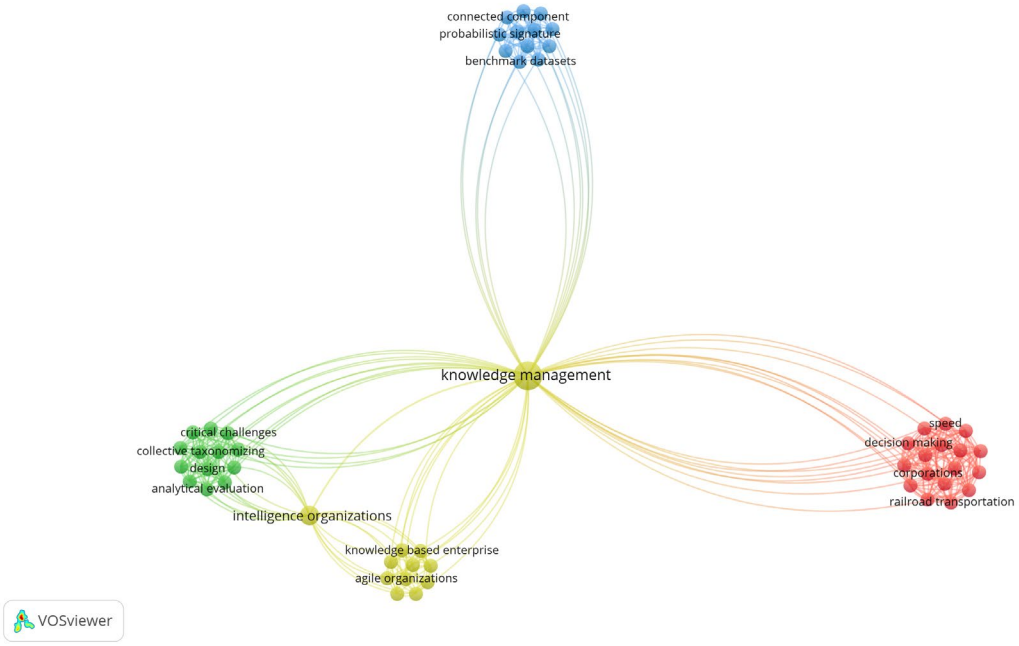


Figure 6. All the keywords and the relationship between them for ”knowledge management – intelligence organizations” expression – VOSviewer

Source: Authors’ own research.

As it can be seen, ”knowledge management” expression from the yellow cluster is linked with all the other clusters. Also, ”intelligence organizations” keyword is placed in the yellow cluster, being linked with the green cluster.

Given the fact that the 4 clusters represents the 4 publications from the used database, these papers were searched in Scopus core collection in order to identify the corresponding cluster. Therefore, the blue cluster, which contain expressions such as ”database systems”, ”large datasets”, ”parallel database” and ”large-scale entity resolution”, corresponds to the conference paper of Yuhang Zhang, Tania Churchill, Kee Siong Ng and Peter Christen named ”Scalable entity resolution using probabilistic signatures on parallel databases”. The red cluster, which include keywords like ”high-speed train manufacturing”, ”railroads”, ”railroad transportation”

and ”industry”, corresponds to the article published by Martins S. Moretto, Pastrana A. Palma and Brandao A. Moniz named ”Technology assessment in the high-speed train manufacturing industry: Evidence from a case study”. The green cluster, characterized by expressions like ”collective taxonomizing”, ”web 2.0”, ”design science” and ”global taxonomy”, represents the article published by Harris Wu, Michael D. Gordon and Weiguo Fan named ”Collective taxonomizing: A collaborative approach to organizing document repositories”. Finally, the yellow cluster, which include the keywords from our area of interest, such as ”knowledge management”, ”intelligence organizations” or ”learning organizations”, represents the book chapter written by Edmund Pawlowski, named ”Organizational innovations and knowledge based enterprises. Theoretical postulates and empirical issues”, published in the book written by Stefan Trzcielinski and Waldemar Karwowski, named ”Advances in Ergonomics in Manufacturing”.

In this context, ”intelligence organizations” expression is used to describe an agile and learning organization, and not to name the law-enforcement organizations within a state that operates in the national security field. Therefore, none of this 4 researches addressed the possibility to integrate the knowledge strategies concepts in the intelligence organizations vision.

Conclusion

The main purpose of this paper is to identify the possible existence of any research regarding the integration of knowledge strategies in the intelligence organizations vision, that was indexed in Scopus core collection.

Therefore, this research focused on analyzing the databases retrieved from Scopus core collection, in order to identify any linkages between intelligence structures and knowledge strategies or knowledge management.

After conducting this research it can be concluded that there are not any publications regarding the implementation of knowledge related studies in the intelligence structures activity, based on two statements as follows: the data retrieved from Scopus database indicated no linkages between the two domains and the non-existence of any publications indexed in Scopus core collection for certain expressions that were searched.

Given this, I consider that the two domains that were the object of the bibliometric analysis of this paper should be researched together, in order to determine the necessity, opportunity and possibility of implementing the concepts of the knowledge strategies domain in the intelligence structures vision.

The contribution of this paper comes from the fact that this study is the first one to research the possible connection between knowledge strategies and intelligence structures. Also, the bilbiometric analysis demonstrated that these two domains were never researched together in a paper indexed in Scopus core collection.

The main limitation of this research comes from the fact that the bibliometric analysis was conducted using only databases retrieved from Scopus. In order to overcome this limitation, future research should include databases from Web of Science or Google Scholar and compare the conclusions.

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