

Integrative Review: Knowledge Management In Human Capital Development For Organizations

Andreia de Bem Machado¹, Rinaldo Aparecido Nunes²

¹(Engineering and management / Uniasselvi - FAVIM, Brusque Santa Catarina Brazil)

²(Mangement/ Faculdade Dom Ricardo- Guarulhos, São Paulo - Brazil)

Corresponding Author: Andreia de Bem Machado

Abstract: The society of the 21st century is characterized in the new organizations, in which it does not refer to the knowledge one has about social issues. Thus, human capital linked to knowledge management was characterized by the importance of people and knowledge in organizations. The objective is to analyze the light of the systematic review of knowledge in the development of human capital for organizations. For this, a bibliometric analysis was performed from a systematic search in the Scopus database. As a result, identify and investigate the field of study, Business, Management and Accounting, Social Sciences, Medicine, Engineering, Computer Science, Health Sciences, Economics, Economics and Finance, Environmental Science, Nursing, Psychology, Arts and Humanities, Sciences Agrarian and Biological Sciences, Biochemistry, Genetics and Molecular Biology, Earth Sciences and Planetary Sciences, Health Professions, Materials Science, Multidisciplinary, Pharmacology, Toxicology and Pharmacy, Mathematics, Chemical Engineering, Chemistry and Energy.

Keywords: Knowledge Management, Human Capital, Organizations

Date of Submission: 14-08-2019

Date of Acceptance: 29-08-2019

I. INTRODUCTION

The debate on knowledge construction linked to knowledge management is not new. The discussion arose in the 1990s, based on issues pertaining to business strategy, with knowledge as a value-generating factor within the organization. Knowledge management continues to be reinvented and reorganized, so it requires time for its actions, opportunities and its effects are understood and internalized.

The construction of knowledge is a process that occurs from the management of this knowledge that leads to learning (Machado, 2018). Knowledge management, then, can be understood as: Formal knowledge management to facilitate knowledge creation, access, and reuse, often using information technology (O'leary, 1998, p. 34).

Some definitions of knowledge management are linked to the construction of knowledge, including discussions based on the successive transition between tacit and explicit knowledge and vice versa. It is the spiral of knowledge, proposed by Nonaka and Takeuchi (1997).

The knowledge spiral model presented by Nonaka (1994) and discussed by other authors (Botha Et Al., 2008; Brown; Duguid, 1998; Wellman, 2009; O'dell; Grayson, 1998; Nonaka; Takeuchi, 1997) describes the dialectic of knowledge that generates innovation. For the authors, the construction of knowledge is a dynamic process between the subjective (tacit knowledge) and the objective (explicit knowledge).

Nonaka and Takeuchi (1997) describe that there are four processes of knowledge conversion, which develops through four forms, understood by the authors as SECI model (socialization, externalization, combination and internalization).

- Socialization - Occurs when an individual socializes tacit knowledge, such as mental models, experiences, and practices, directly with another. It can occur in daily interaction, which happens in organizations (Nonaka And Takeuchi, 1997).

- Externalization - Form of knowledge creation caused by reflection and dialogue of individuals. The articulation of knowledge is concretely done through books, documentation, articles, spreadsheets, models, metaphors that are considered important externalization mechanisms (Nonaka And Takeuchi, 1997).

- Combination - Occurs when explicit knowledge is rethinking, rearticulated, re-combined, giving rise to a new concept or practice. It is the association of different forms of explicit knowledge that can occur through communication networks aimed at improvement actions (Nonaka And Takeuchi, 1997).

• Internalization - happens from explicit knowledge to the tacit. This process is linked to “learning by doing” where individuals create their own mental models of documents (Nonaka And Takeuchi, 1997).

It is considered that individual learns the whole process dynamics of a company, to the point of knowing his work without the need to request information, he incorporated explicit knowledge as tacit, grouping concepts in operational knowledge (Machado, 2018).

For the construction of organizational knowledge, ie the management of knowledge in the development of human capital in organizations, it is necessary that the accumulated tacit knowledge be socialized with the members of the organization (Nonaka And Takeuch, 1997) starting a new spiral of building knowledge.

Based on this context, the objective of this study is to analyze the light of the systematic review of knowledge management in the development of human capital for organizations. To this end, the article is organized into five sections. The first one explained here, entitled of introduction, presents a research context. The second section describes the methodological procedures followed in the research. In the third section, we present the data, the results and a bibliometric analysis of this research. In the fourth section, the final considerations are made. Finally, in the fifth section, the references used are listed.

II. MATERIAL AND METHODS

ThisTo answer this research question, we worked from an exploratory-descriptive view with the inductive method in order to delineate the theme and broaden the researchers' familiarity with the fact from sufficient data allowing the researcher to infer a truth (MARCONI ; LAKATOS, 2010).

As a literature search method, we used the systematic search in an online database, followed by a bibliometric analysis of the results. Bibliometrics is a methodology from information sciences that uses mathematical and statistical methods to map documents and publication patterns (FEATHER; STURGES, 2003; SANTOS; KOBASCHI, 2009).

Bibliometrics enables the organization and quantitative analysis of relevant data such as: production by region; temporality of publications; research by area of knowledge; study citation count; impact factor of a scientific publication among others. This analysis allows the systematization of the results of a research and the minimization of the occurrence of possible biases when looking at a particular theme.

Data Collection Procedures

For bibliometric analysis, the study was organized in three distinct stages: planning, collection and results. These steps took place in an integrated manner to answer the guiding question of the research: How is knowledge management in the development of human capital for organizations? . Planning began in November 2018, when the survey was conducted. In the scope of the planning, the Scopus <<http://www.scopus.com>> database was defined as relevant, due to its contribution in the academic environment, its interdisciplinary character, its constant updating and also because it is one of the largest databases. abstracts and references from peer-reviewed scientific literature.

Considering that the search problem was delimited in the planning phase, the search terms, namely: “management of knowledge in the development of human capital for organizations” As a basic principle for the search, we opted for use of terms in the fields "title", "abstract" and "keyword", without restriction of time, language or any other that may limit the result.

In the data collection phase, a total of 296 indexed papers were retrieved, with the first record dated 1969 and the last 2018.

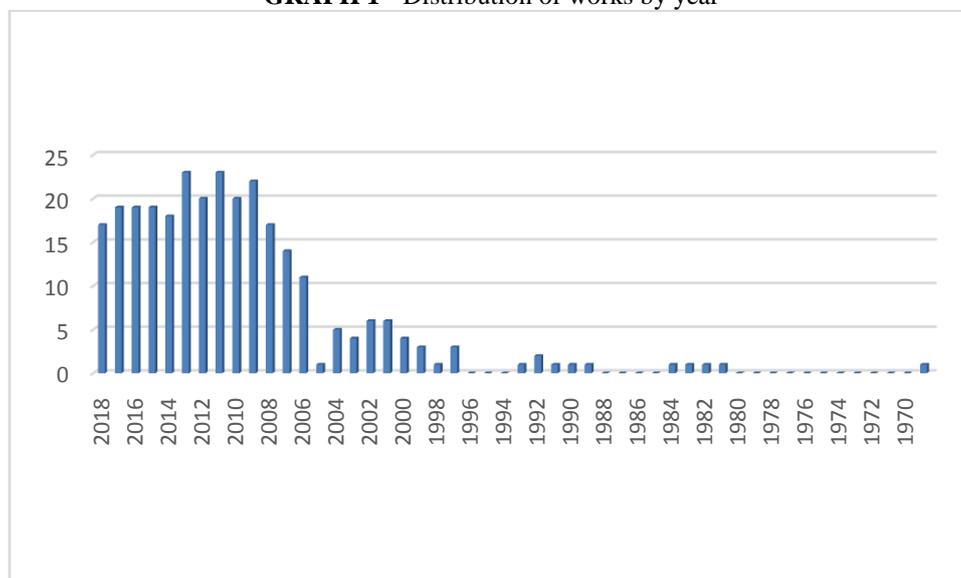
As a result of this data collection, it was identified that the works were written by 154 authors, linked to 145 institutions. 160 keywords were used to identify and index the publications, which are distributed in 22 areas of knowledge. Out of the universe of 296 scientific papers, all are peer-reviewed articles composing the sample for a bibliometric analysis in the area of Business, Management and Accounting, Social Sciences, Medicine, Engineering, Computer Science, Decision Sciences, Economics, Econometrics and Finance, Environmental Science, Nursing, Psychology, Arts and Humanities, Agrarian and Biological Sciences, Biochemistry, Genetics and Molecular Biology, Earth and Planetary Sciences, Health Professions, Materials Science, Multidisciplinary, Pharmacology, Toxicology and Pharmaceuticals, Mathematics , Chemical Engineering, Chemistry and Energy which allows to weave the state of the art of the theme from the consulted database.

For the bibliometric evaluation of the results, the result was exported to a bibliographic management software called EndNoteWeb (web-based software) and, in an integrated way, the organization of a data sheet. Thus, the relevant information was classified according to: temporal distribution; main authors, institutions and countries in evidence; type of publication in the area; top keywords and most referenced works.

III. RESULT

Table no 1 Initially we analyzed the temporal distribution of the works, which allowed us to identify that the first publication is dated 1969 with an article and followed for 11 years without publication, ie from 1970 to 1981 there was no record. Already in 1982 there was an isolated publication and in the year 1983 and 1984 had a publication. There were 4 years without publication from 1985 to 1988 and the year 1989 had a publication, followed by 1990 and 1991 with only one publication. In 1992 it had a small growth with two publications in the area. Already in 1993 had only one publication and in the following three years 1994, 1995 and 1996 had no publication in the area. Already in the year 1997 followed with an elevation in the publication with three articles. In the year 1998 had a publication. And in 1999 there were three publications and in 2000 there were also four publications. In 2001 there were 6 publications followed by 2002 with 6 publications. Already in 2003 there were 4 publications. In the year 2004 there were 5 publications. In 2005 there was a decrease in publications with only one published document. In 2006 there was a considerable increase in publications with 11 articles. In 2007 there was another increase in publications with 14 articles published. In 2008 there was a further increase in publications with 17 publications, followed by 2009 with 22 published documents. In 2010 there was a decrease in publications with 20 articles published. In 2011 there was an increase in publications with 23 publications. In 2012 there was a decrease again with 20 published articles. In 2013 there was again a growth with 23 articles and 2014 followed with a decrease in the publication of articles with 18 articles published. Already in the years 2015, 2016 and 2017 there was a small growth presenting 19 indexed articles respectively each year. In 2018 to date, a decrease has been identified again with 17 published articles. This frequency shows the discontinuity and lack of research in the area. For better visualization, the graph was 1.

GRAPH 1 - Distribution of works by year



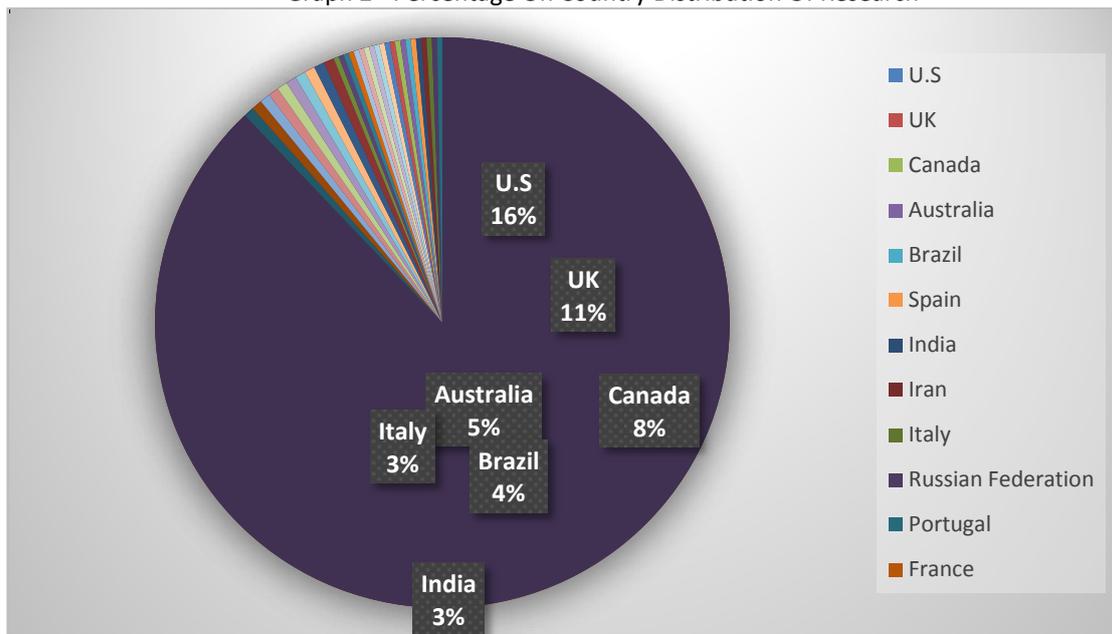
SOURCE: Prepared by the authors (2019).

The first article published in 1969 was entitled *The role of business management in relation to economic development* by author Heller, F.A. In this article we discussed two concepts that are about socio-psychological and habit issues and skills and competencies within organizations.

However, it is clear that research in the area can be considered incipient, as they are, according to quantitative analysis, in small proportion and ancestry with moments of discontinuity for up to two consecutive years. These data also show that in the globalized world there is a lack of research on the theme of knowledge management practices in the development of human capital in organizations.

From a systemic look and directed to the 296 papers, we can observe a varied list of countries that stand out in the research regarding the management of knowledge in the development of human capital in organizations. Noteworthy for the United States with an average of 186 of the total publications, a total of 56 articles. Secondly, the highlight is for the United Kingdom with 11% of the publications, ie 37 works and Brazil is in 5th place with only 4% of the publications. and practice in the national scenario, as graph 2 below:

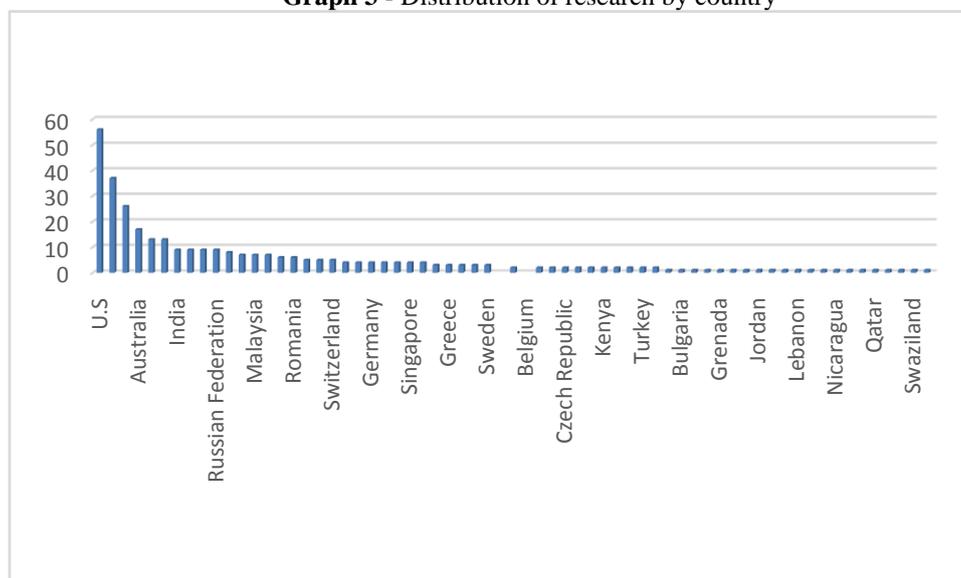
Graph 2 - Percentage On Country Distribution Of Research



SOURCE: Authors (2019).

Graph 3 shows the countries involved in publications indexed in the area by the Scopus

Graph 3 - Distribution of research by country



Source: Authors (2019).

Another quantitative analysis carried out from a bibliometric perspective is related to the number of authors that appear in the result of this search, which allows us to state that there are no outstanding authors in this line of research. The area is under construction and development and the researchers who work in it are still present in varying numbers. Table 1 organized the main authors considered in this area, and they are cited for having at least 3 publications in the area as indexed in the scopus database.

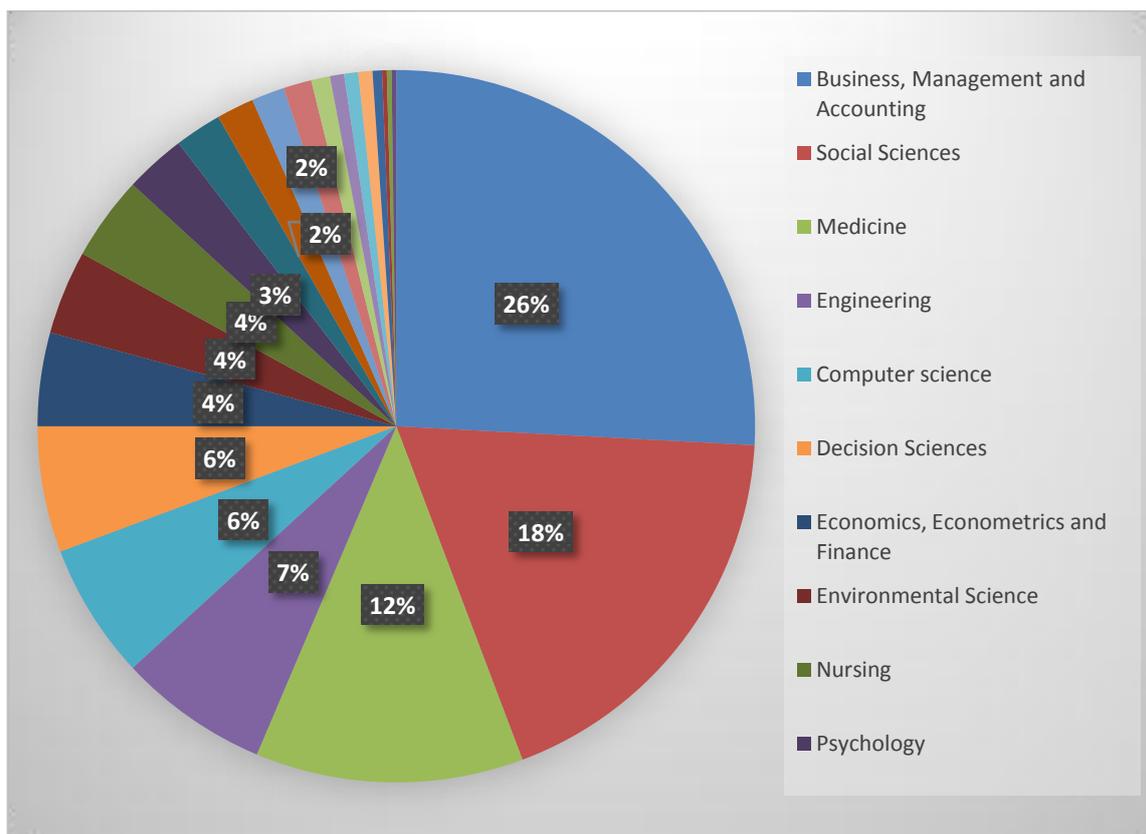
Author	Number of Posts	Affiliation	Country
Kong, Eric.	4	Southern University Queensland Education Toowoomba	Australia
Begley, Sandra	3	University of Birmingham	UK
Covell, Christine L.	3	Open University	Canada

Singer, Peter A.	3	University of Toronto	Canada
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Table 1 - Authors with the largest number of publications in their area, affiliations and countries
Source: Prepared by the authors (2019).

Based on Table 1, we also describe the number of publications, the university of origin and the respective country and thus it can be observed that 4 outstanding authors with discussions and publications on this theme 2 are from Canada, followed by Australia. and United Kingdom.

Based on the general survey, it was also possible to analyze the areas of concentration of articles that are in the following fields of knowledge: Business, Management and Accounting, Social Sciences, Medicine, Engineering, Computer Science, Health Sciences, Economics, Economics and Finance, Environmental Science, Nursing, Psychology, Arts and Humanities, Agrarian and Biological Sciences, Biochemistry, Genetics and Molecular Biology, Earth and Planetary Sciences, Health Professions, Materials Science, Multidisciplinary, Pharmacology, Toxicology and Pharmaceuticals, Mathematics, Chemical Engineering, Chemistry and Energy. It is verified that the largest publication is in the area of Social Sciences with 20% of publications, followed by Business, Management and Accounting with 19% and Computer Science and medicine with 14%, as shown in graph 4 below:



Graph 4 - Analysis of the percentage of knowledge areas of the publication
Source: Prepared by the authors (2019).

Another analysis, based on bibliometric analysis, based on the group of works retrieved from the Scopus database, were the keywords used, which are synthesized in 160 different words. The highlight was the keyword Human 76 occurrences, followed by knowledge management with 72, article with 70, human with 67, organization and management with 60 words. Followed by human capital with 55, intellectual capital with 37, education with 27, organization with 23, social capital with 23, human resource management with 22, innovation with 22, and knowledge with 22. Other occurrences were not considered in this article, as appear with the frequency considered low and they are 17 times only.

In the analysis of the keywords, it is clear that the discussion about knowledge management practices in the development of human capital in organizations emphasizes with emphasis an active proposal to teach and learn in the educational scenario and in the business world, which characterizes the demand for new ways to share knowledge.

Finally, looking for a qualitative analysis, it was noticed that this debate also involves the concern with public policies focused on innovation, sharing through communication and social networks in the globalized world where knowledge is the factor of production. However, it was not identified despite the relevance and emphasis of the theme knowledge management practices in the development of human capital in organizations.

IV. CONCLUSION

Addressing knowledge management practices in the development of human capital in organizations implies discussing aspects related to innovative technologies that disseminate knowledge through innovative tools that form a critical and autonomous subject in different dimensions of society.

The scientific mapping of the production related to the theme “knowledge management in the development of human capital in organizations”, made in the Scopus database, allowed a bibliometric analysis of the theme that described the main contemporary discussions and the intersection between the areas. As a result, it was identified that research emerges in the multidisciplinary field, intersecting discussions with the areas of Business, Management and Accounting, Social Sciences, Medicine, Engineering, Computer Science, Health Sciences, Economics, Economics and Finance, Environmental Science, Nursing, Psychology, Arts and Humanities, Agrarian and Biological Sciences, Biochemistry, Genetics and Molecular Biology, Earth and Planetary Sciences, Health Professions, Materials Science, Multidisciplinary, Pharmacology, Toxicology and Pharmaceuticals, Mathematics, Chemical Engineering, Chemistry and Energy.

It is proposed that studies in different areas be analyzed by an integrated look at new ways of applying knowledge management in the development of human capital in organizations, both in educational and in the business world, promoting information networks that lead the human being to new scenarios. The theme lacks research that integrates knowledge management practices in the development of human capital in organizations, so it is suggested studies that address themes on different forms of knowledge management practices with knowledge sharing using different technologies in the educational and in the business world.

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Andreia de Bem Machado " Integrative Review: Knowledge Management In Human Capital Development For Organizations." *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*. vol. 24 no. 08, 2019, pp. 07-13.