



**CONTENT ANALYSIS OF PUBLICATIONS ON CREATIVITY AND INNOVATION IN
THE SELECTED JOURNALS**

Candidate: Ana Salas Pérez

Tutor: Francesc Xavier Molina Morales

Degree in Business Administration

Academic Year: 2013-2014

CONTENT ANALYSIS OF PUBLICATIONS ON CREATIVITY AND INNOVATION IN THE SELECTED JOURNALS

Ana Salas Pérez

ABSTRACT: This paper presents a literature review on two issues: Creativity and Innovation. The main goal is the analysis of some articles from different journals to determine the importance of these two issues in the last 5 years (2009-2013) in order to do this, I am going to use the major journals related to business world. Following a review of 90 articles, we proceed to the extraction of a series of conclusions that are going to be presented in this paper. To perform this extraction, we are going to focus on the abstract of the articles and we are going to select those articles in whose abstracts appear the words creativity and innovation. The abstract is the summary of the article and it explains in a brief way the content of the article and it is where you can see a first idea of the article. Therefore, we are going to use the abstract as a selection criterium of the articles, because if it appears one of the two words or both of them, in this case, creativity or innovation in it, the article will probably talk about these concepts.

KEYWORDS: Creativity, Innovation, Content Analysis

INDEX

1. INTRODUCTION.....	6
2. ECONOMIC CONTEXT	7
4. METHODOLOGY.....	10
5. ANALYSIS OF THE RESULTS.....	16
5.1. Scientific Nature of analysed work: evolution.....	16
5.2. Existence of research groups	18
5.3. Concepts, theories and lines of Research	24
5.4. Methodology and characteristics of research.....	36
6. DISCUSSION AND CONCLUSIONS.....	56
7. LIMITATIONS AND FUTURE RESEARCH	60
8. REFERENCES	61
9. APPENDIX: LIST OF PAPERS.....	63

TABLES AND FIGURES INDEX

1. Figure 1. Impact Index of the chosen journals to carry out the research according to the Journal Citation Reports.....	13
2. Table 1. Articles ordered according to the journal belonging, to the keyword in the abstract and to the year of the publication.....	15
3. Table 2. Articles that use empirical dates and articles based on conceptual data and their percentage.....	17
4. Figure 2. Evolution of the empirical and conceptual work.....	18
5. Table 3. Evolution of the number of individual or collective articles and their percentage.....	19
6. Figure 3. Evolution of the number of articles according to whether it is an individual or collective article.....	19
7. Table 4. Number of authors of articles sorted depending on the year and the appropriate percentage.....	20
8. Table 5. Evolution of number of single or collective articles depending on journal and year and the corresponding percentage.....	21
9. Figure 4. Evolution of the percentage that represents the individual and collective articles during the period 2009-2013.....	22
10. Figure 5. Number of Individual articles depending on journal and year.....	23
11. Figure 6. Number of collective articles depending on journal and year.....	24
12. Table 6. Percentage of articles according to the word contained in the abstract (Creativity, Innovation, Creativity and Innovation).....	25 - 26
13. Table 7. Evolution of the lines of research and their corresponding percentage.....	27
14. Figure 7. Evolution of the articles according to the word contained in the abstract (Creativity and Innovation).....	28
15. Table 8. Percentage of articles according to the word contained in the abstract (Creativity, Innovation, Creativity and Innovation) in relation to the journal.....	29
16. Figure 8. Classification of articles based on the word that is mentioned in the abstract (Creativity, Innovation, Creativity and Innovation) and according to the journal.....	30
17. Table 9. Lines of research by levels of analysis: lines of research of the articles that contain the word Creativity in the abstract.....	31

18. Figure 9. Percentage of the total classified articles according to the levels of analysis determined in the analysis of the lines of research.....	32
19. Table 10. Lines of research by levels of analysis: line of research of articles containing the word Innovation in the abstract.....	33
20. Figure 10. Percentage corresponding to the total classified articles according to the levels of analysis determined in the analysis of the lines of research.....	34
21. Table 11. Research lines by levels of analysis: line of research of articles containing the word Innovation and Creativity in the abstract.....	35
22. Figure 11. Percentage corresponding to the total classified articles according to levels of analysis determined in the analysis of the lines of research.....	36
23. Table 12. Methodology and characteristics of the research and its corresponding percentage.....	37
24. Figure 12. Percentage of empirical and conceptual works.....	37
25. Figure 13. Percentage of conceptual and descriptive works of all the 38 conceptual articles.....	38
26. Figure 14. Percentage of qualitative and quantitative studies of the total of the 51 empirical articles.....	39
27. Figure 15. Recipients of the surveys made in quantitative empirical articles.....	40
28. Figure 16. Techniques used in the quantitative empirical articles.....	40
29. Table 13. Analysis of the quantitative empirical articles, indicating the sample, the data source and the technique.....	41 - 50
30. Figure 17. Percentage of the articles that use primary information from total percentage of articles that use secondary sources.....	51
31. Table 14. Primary or secondary sources of information according to the journal and to their corresponding percentage.....	52
32. Figure 18. Percentage of articles that use primary or secondary sources depending on the journal.....	52
33. Table 15. Geographical scope of the articles analysed according to the journal and its corresponding percentage.....	53
34. Figure 19. Percentage of works depending on the geographical area (national and international).....	54
35. Table 16. Temporal scope of the articles analysed according to the journal and its corresponding percentage.....	54
36. Figure 20. Percentage of works depending on the time sphere (longitudinal and transversal).....	55

1. INTRODUCTION

Both Innovation and Creativity are the key elements for the company to grow and to give a boost to its potential. Therefore, many of the companies, due to the economic and financial crisis, have seen the need for innovation in their organizations and the need to be creative in order to compete better and stay or be born in the new market. Companies today, not only care about their "numbers". Conflict resolution, creativity, teamwork, results orientation, innovation, etc. are some of the qualities that companies look for today.

Therefore, this project aims to show the state of the published academic research on Innovation and Creativity. For this purpose, we carry out a content analysis which consists of a rigorous study of a group of journals with a high impact in the field of business administration when we talk about Innovation and Creativity.

Given the extent of the proposed objective, we have limited the number of journals to 5 within a period of 5 years (from 2009 to 2013). The selected articles have been tested and we have obtained the information needed to proceed with the preparation of this project. We believe that this research will provide a significant insight into how the studied issues have been analysed (Innovation and Creativity).

The current project will be structured in the following way: firstly, it is given the methodology used to perform content analysis; and secondly, we proceed to the extraction of the results and conclusions of the analysis.

2. ECONOMIC CONTEXT¹

It is increasingly important for companies to have in mind Innovation and Creativity in their organizations to cope this way with the fierce competition that exists in the market. The crisis has caused an important change in business, as it has moved from a situation of high output growth to, a period of great recession. As a result of this crisis it took place a lot of financial constraints. Thus, it started a period of high uncertainty.

The economy came from a period of high growth where prices increased and where companies paid no interest to Innovation and Creativity. However, in 2008, the rising prices of raw materials caused significant damages in the economy and it began a period of high volatility.

The crisis soon spread quickly in developed countries all around the world. In February 2008, inflation had reached record levels. By the first term of 2009, the U.S. and Europe were far behind countries like China, Russia and Brazil, in regards to stock market index. All this had a significant impact on workers, which was reflected on the increasing number of unemployed people, reaching a record high in 2011, with a total of 205 million unemployed worldwide.

Regarding Europe, the anti-crisis measures were taken late, as the European Central Bank was unable to foresee the crisis. This delay produced that the taken measures were austerity measures and containment of public spending. This situation has supposed an obstacle for consumers and producers, as they have seen restricted their access to finance.

As in the rest of the world, the crisis also spread quickly through Europe, reaching Spain. One of the consequences of the crisis that had more impact in Spain was the important increase of unemployment. In 2008, a lot of businesses closed and filed for bankruptcy. Defaults on many companies produced the need for intervention of some financial institutions by the state. This economic crisis also impacted the Spanish

¹ Information concerning the paragraph "Economic Context" is based on: Wikipedia. Crisis Económica [online] Available at: http://es.wikipedia.org/wiki/Crisis_econ%C3%B3mica_de_2008-2013 [Accessed 29 April 2014]; Wikipedia, 2014. Creatividad [online] (2014) Available at: <http://es.wikipedia.org/wiki/Creatividad> [Accesses 24 de April 2014] and Wikipedia. Innovación [online] Available at: <http://es.wikipedia.org/wiki/Innovaci%C3%B3n> [Accesses 24 April 2014]

financial system. Despite the numerous measures undertaken, the effect is still limited and only from the year 2014 we can start to see the first small improvements.

As we have already seen, this crisis has caused a change in the business world, where organizations have seen the need to incorporate innovation in their companies to compete in the market with other companies or to use creativity to differentiate from its competitors.

3. WORK MOTIVATION AND OBJECTIVES OF THE RESEARCH

As already stated above, the topics chosen for the analysis are Creativity and Innovation. The selection of these two issues did not occur randomly, but it has a justification. During my years of learning, these terms have always been mentioned in different subjects, and professors have always spoken in these subjects of Creativity and Innovation as a key element in today's organizations, which is great interest for me to proceed with the present analysis

On the other hand, we used the Content Analysis as a technique to carry out the observation of the two chosen topics. The selection of this technique is due to the existence of a research group in the Department of Business Administration from the University Jaume I that uses this technique to perform various analyses. My project tutor is in group.

The main objective of this paper is to study in depth the knowledge and academic research on creativity and innovation in the last five years. To achieve this objective, an analysis carried out from 3 different points of view has been done: Creativity, Innovation and the relationship between Creativity and Innovation.

To continue our work, we are going to first define the terms innovation and creativity. Innovation is defined as "the action and effect of innovation, that is to say, creation or modification of a product and its introduction into a market." (RAE, 2014) Creativity is defined as "the power to create, the ability of creation." (RAE, 2014)

4. METHODOLOGY

For the preparation of this work, we have used the technique of Content Analysis². The Content analysis has as main purpose to get measures and variables through a series of written or recorded communications from bibliography materials that previously existed. It is a technique for collecting, sorting and analysing information from both written and oral communications by means of an objective, systematic and quantitative procedure. In order to perform the analysis, we have used the following steps:

1. Formulate the research question or hypothesis
2. Define the studied population
3. Select the sample:
4. Select and define the Unit of Analysis
5. Construct the Categories of Content to Analyse
6. Establish a system of quantification
7. Code, Data Analysis, Conclusions

The sources of research of this study are obtained from a variety of periodic publications, obtained from the ISI Web of Knowledge³. The ISI Web of Knowledge is an online service about scientific information, which is provided by the Institute for Scientific Information (ISI). Through this service you can have access to a range of bibliographic databases and to other resources comprising all fields of scientific knowledge. This bibliographic database has a large number of citations from more than eight thousand journals in science, humanities, arts, technology, etc.; with a considerable number of congresses and conferences on science and social science; a database of medical journals, and other several resources. Journals are obtained from a particular index which is the Journal Citation Index. This index is published annually

² Vallet-Bellmunt, MT (2013-2014); Transparencies [PowerPoint] and Vallet-Bellmunt, MT; Maretínez-Fernández, MT; Capó.Vicedo, J (2011) Supply chain management: A multidisciplinary content analysis of vertical relations between companies, 1997–2006, *Industrial Marketing Management* Forthcoming [Accesses 29 de April 2014]

³ Wikipedia. ISI Web of Knowledge [online] Available at: http://es.wikipedia.org/wiki/ISI_Web_of_Knowledge [Accesses 24 April 2014]

and assesses the impact and importance of the major journals on the field of applied and social sciences.

First of all, we proceed to identify articles that are subsequently used in this research. The extracted articles are just a representative sample, despite the fact that limiting the research to a certain number of articles can be object of discussion. This is why, due to the need to limit our sample, we choose those articles from the journals which, according to the ranking ISI Web of Knowledge, are more important:

1. ACADEMY OF MANAGEMENT JOURNAL (AMJ)⁴. It is an academic journal which is reviewed by experts in management. It is a journal that has been essential for the study of administration for more than five decades. Its articles have been continuously mentioned in the main media such as The New York Times, The Economist, The Wall Street Journal, the Washington Post, Business Week or Fortune and Business. Its level of impact in the year 2012 was of 5,906 according to the Journal Citation Reports. Its publications are done in February, April, June, August, October and December, with a total of 6 publications per year.
2. ACADEMY OF MANAGEMENT PERSPECTIVES (AMP)⁵. It is an academic journal covering topics such as management and business. The level of impact of the journal according to the Journal Citation Reports in 2012 was of 3,174. It stands out for being a journal whose articles are aimed at a non-specialist reader and for having an approach based on the development of the theory. This journal is published four times a year; in February, May, August and November.

⁴ Academy of Management Journal (AMJ) (2014) [online] Available at: <http://aom.org/AMJ/> [Accesses 29 de April 2014]

⁵Academy of Management Perspectives (AMP) (2014) [online] Available at: <http://aom.org/amp/> [Accesses 29 de April 2014]

3. ACADEMY OF MANAGEMENT REVIEW (AMR)⁶. This is one of the five most influential journals and it is also one of the most mentioned and reviewed journals in the world of business. In 2012, the level of impact was of 7,895 according to the Journal Citation Reports.
4. ADMINISTRATIVE SCIENCE QUARTERLY (ASQ)⁷. This journal is a journal that covers the field of organizational studies. In the year 2007, it was placed as the business journal number 16th in the ranking by the Financial Times. It is published quarterly and it is where theoretical and empirical work on organizational studies appears. According to the Journal Citation Reports its impact level in 2012 was of 4.182.
5. ASIA PACIFIC BUSINESS REVIEW (APBR)⁸. This journal deals with issues such as the growth of multinationals in world markets. It covers a number of lessons in economics, history, politics and culture whose purpose is to explore business in the Asia Pacific. Its impact factor for 2012 was of 0.783 according to Journal Citation Reports.

⁶ Academy of Management Review (AMR) (2014) [online] Available at: <http://aom.org/AMR/> [Accesses 29 de April 2014]

⁷ Administrative Science Quarterly (ASQ). (2014) [online] Available at: <http://asq.sagepub.com/> [Accesses 29 de April 2014]

⁸ Asia Pacific Business Review (APBR). (2014) [online] Available at: http://www.researchgate.net/journal/1360-2381_Asia_Pacific_Business_Review [Accesses 29 de April 2014]

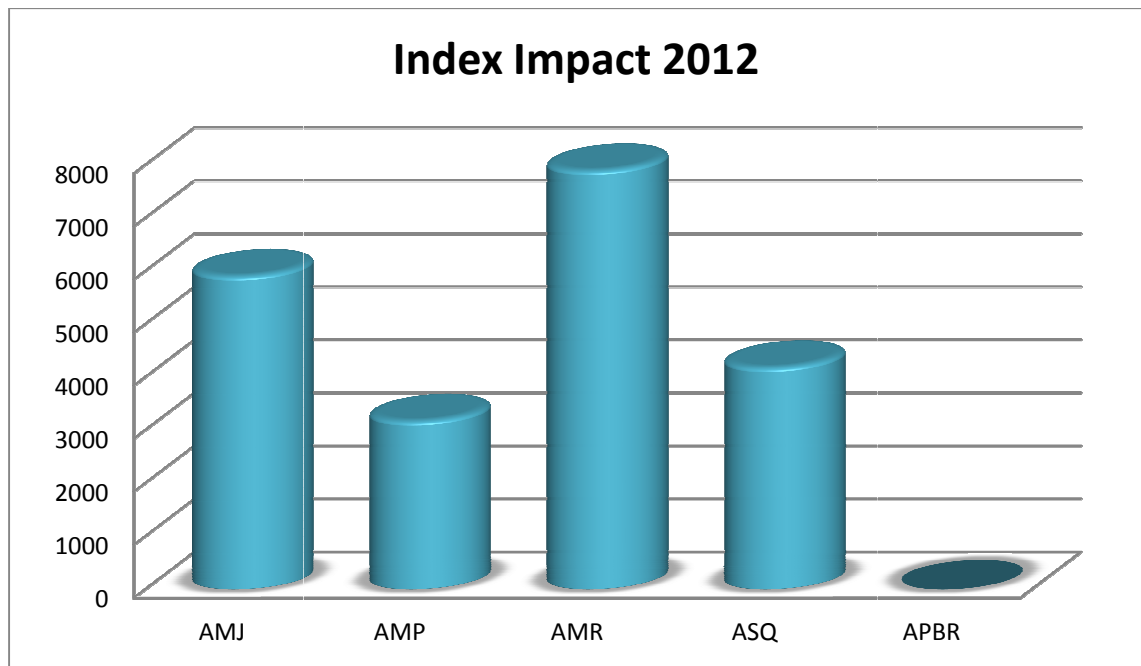


Figure 1. Impact Index of the chosen journals to carry out the research according to the Journal Citation Reports.

According to the ranking, the American Business Law Journal was placed before the journal Asia Pacific Business Review. However, we have omitted it in our analysis because it is a journal about issues related to corporative law. It was, therefore, a journal that was not appropriate for our research.

The review of the articles is limited to a period of 5 year period from 2009 to 2013. In this way, a representative time frame is obtained to reliably analyse our purpose.

From the selected journals we extract those articles that contain the words Creativity and Innovation in the abstract. Furthermore, by using a series of restrictions we limit the search of articles to certain years (previously mentioned) and the selection of the articles related to a particular topic: the world of business.

Once the 89 articles are identified, we are going to secondly proceed to the analysis of them in order to facilitate further research. For this reason, we are going to use a Card where it is going to appear the following information in each article:

1. Title
2. Name of the journal

3. Author
4. Year
5. Empirical Analysis
6. Keywords
7. Abstract
8. Definition
9. Methodology / measures

This Card will be completed using the data of each article, so we are going to get 89 Cards, one for each article.

All this allow us to get 89 articles for our research from which we can carry out the analysis. There is a table below where we can see the origin of each of the specified articles as well as the year of the same ones and the key word shown in the abstract.

Table 1. Articles ordered according to the journal belonging, to the keyword in the abstract and to the year of the publication.

JOURNAL	YEAR	CREATIVITY	INNOVATION	CREATIVITY AND INNOVATION	TOTAL
AMJ	2009	3	1	0	4
	2010	4	4	0	8
	2011	3	0	0	3
	2012	4	1	0	5
	2013	1	4	0	5
AMP	2009	1	0	0	1
	2010	1	0	0	1
	2011	1	0	0	1
	2012	0	0	0	0
	2013	1	0	0	1
AMR	2009	0	0	0	0
	2010	1	0	0	1
	2011	0	0	0	0
	2012	0	0	0	0
	2013	0	0	0	0
ASQ	2009	0	1	0	1
	2010	0	0	0	0
	2011	0	1	0	1
	2012	0	0	0	0
	2013	0	0	0	0
APBR	2009	0	0	0	0
	2010	0	8	0	8
	2011	2	20	2	24
	2012	1	12	0	13
	2013	1	11	0	12
TOTAL		24	63	2	89

5. ANALYSIS OF THE RESULTS

The content analysis performed with the 89 articles has allowed us to obtain a database. From this database, we have carry through a work and have achieved a number of important results we present below. To perform this analysis, we are going to divide the results in several ways. First of all, we are going to conduct the analysis of the scientific nature of the work. Secondly, we are going to analyse if there are or there aren't any research groups about the articles that we have chosen for our analysis. Then, we are carrying out the analysis of the lines of research; first by discussed concepts and then by levels of analysis. Finally, we are going to conduct the analysis of methodologies and characteristics of the research.

5.1. Scientific Nature of analysed work: evolution

To carry out the analysis of the evolution of the scientific nature of the work we have used an indicator: the proportion of the empirical studies versus the proportion of the conceptual works. We believe that a work is empiric when it is based on empirical experimentation, observation of phenomena and statistical analysis; that it so say, it is not only guided by reflection, but also by the facts of observation. On the other hand, a conceptual work is one that is not based on experimentation and whose aim is to clarify the meaning of concepts and examine their suitability into practice. It is shown below a table that provides information on the total percentage of empirical and conceptual articles.

Table 2. Articles that use empirical dates and articles based on conceptual data and their percentage.

YEAR	EMPIRICAL	CONCEPTUAL	TOTAL	%
2009	5	1	6	6.74%
2010	11	7	18	20.22%
2011	17	12	29	32.58%
2012	11	7	18	20.22%
2013	7	11	18	20.22%
TOTAL	51	38	89	100%
%	57.31%	42.69%	100 %	

This table shows that there are more works that are based on experiments, that is, empirical works, than works that are not based on experimentation, conceptual works. From the 89 analysed articles, 53 are empirical while 37 are conceptual. Therefore, 58.89% of the articles have used experimental data or observations to address the issue Innovation and Creativity. The rest, 41.12% are conceptual works which speak of Creativity and Innovation without relying on experimentation. We can also see that there is a considerable increase in the rising number of articles dealing with the topic of Creativity and Innovation from the year 2010. That is to say, if we look at the table, in 2009, the percentage of articles talking about Innovation and Creativity is only 6.74%. Only one year later, this figure tripled reaching 20.22%. In year 2011 we find the largest number of articles dealing with the topic of Innovation and Creativity, coming to represent 32.58% of all the analysed articles. For the two following years, 2012 and 2013, the overall percentage on the total articles analyzed is 20.22% for each year. To see this evolution, we show the following graph.

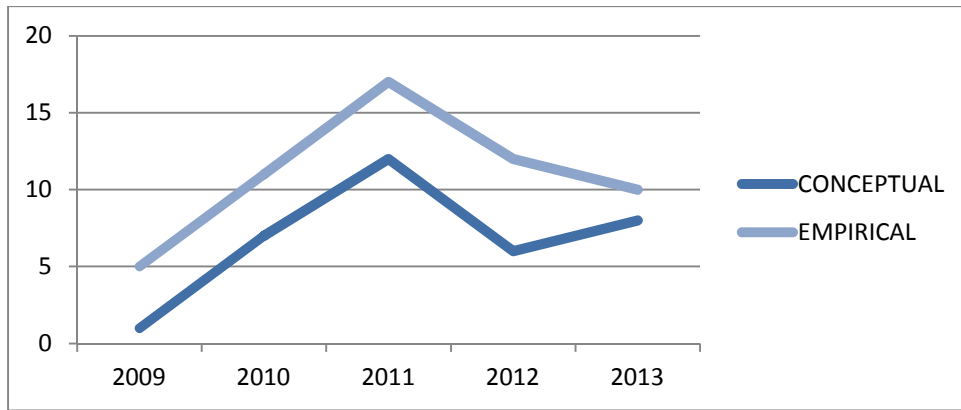


Figure 2. Evolution of the empirical and conceptual work.

With this graph, we can clearly see that empirical work is over conceptual work. That is to say, that of the 89 articles analysed a great majority are empirical. Also we can see that there are substantial increases in the number of articles that talk about Innovation and Creativity from the year 2010.

5.2. Existence of research groups

A second aspect to analyse is related to the existence or not of research groups at the time of the completion of the article. To do this, we do a division into two main blocks. On the one hand, there are individual works and on the other hand we find collective works. Individual works are those that are written by one person, that is to say, those who have only been written by one author. Collective works, however, are those that are written by more than one person, that is to say, there is more than one author and thus a team to proceed to the completion of the article is formed. Below, we can show a table summarizing the data.

Table 3. Evolution of the number of individual or collective articles and their percentage

YEAR	INDIVIDUAL	COLLECTIVE	TOTAL	%
2009	0	6	6	6.75%
2010	2	16	18	20.22%
2011	11	19	30	33.70%
2012	3	13	16	17.98%
2013	8	11	19	21.35%
TOTAL	24	65	89	100%
%	26.97 %	73.03 %	100%	

As we can see in the table, most of the studies were performed collectively, that is to say, more than one person has participated in its elaboration. Moreover, the percentages of collective works almost triple the percentage of individual works. Of all the articles, only 26.97% are individual works that have involved a single author. The rest, 73.03%, are articles where at least 2 authors have participated. The chart presented below shows the evolution of individual and collective articles, and it can clearly be seen that collective works have always been superior to individual ones.

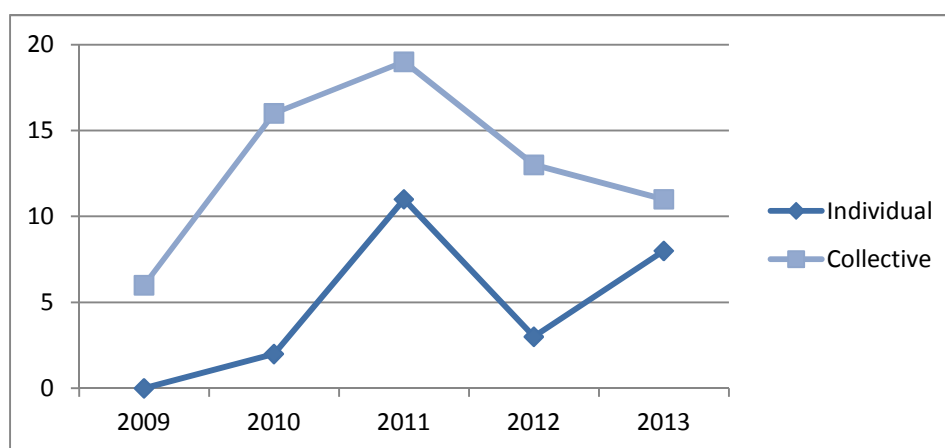


Figure 3. Evolution of the number of articles according to whether it is an individual or collective article.

Below, it is shown a table where we can see the total number of articles depending on the year and the number of authors preparing the article.

Table 4. Number of authors of articles sorted depending on the year and the appropriate percentage.

	Nº AUTHORS	2009	2010	2011	2012	2013	TOTAL	%
Ind.	1	0	2	10	3	8	23	25.84%
Col.	2	1	7	8	4	1	21	23.59%
	3	5	8	10	4	8	35	39.33%
	4	0	0	1	3	2	6	6.75%
	5	0	1	1	0	0	2	2.25%
	6	0	0	0	1	0	1	1.12%
	7	0	0	0	0	0	0	0
	8	0	0	0	1	0	1	1.12%
	TOTAL	6	18	30	16	19	89	100%
	%	6.74%	20.23%	33.71%	17.89%	21.34%	100%	

On the table above, we can see how most of the collective works have been written between 2 or 3 people, and we can see that there are just a few articles in which there are more than three people involved in the its realization. Most of the work is done by a group of three people, and these articles represent 39.33%. They are followed by articles that are written by two people, with a percentage of 23.59%. Then we can find the individual works, covering a percentage of 25.84%. The remaining articles, in which more than three people are involved, have a very small percentage, under 3%.

In the table below, we focus on the analysis of individual articles and collective articles according to the journal where articles are published and according to the year they were published.

Table 5. Evolution of number of single or collective articles depending on journal and year and the corresponding percentage

	JOURNAL	2009	2010	2011	2012	2013	TOTAL	%	TOTAL	%
INDIVIDUAL	AMJ	0	1	0	1	3	5	5.62%	24	26.97%
	AMP	0	0	0	0	0	0	0%		
	AMR	0	0	0	0	0	0	0%		
	ASQ	0	0	0	0	0	0	0%		
	APBR	0	1	11	2	5	19	21.35%		
COLLECTIVE	AMJ	4	7	4	3	2	20	22.47%	65	73.03%
	AMP	1	1	1	0	1	4	4.49%		
	AMR	0	1	0	0	0	1	1.12%		
	ASQ	1	0	0	0	1	2	2.26%		
	APBR	0	7	14	10	7	38	42.69%		
	TOTAL	6	18	30	16	19	89	100%	89	100%
	Individual (year)	0= 0%	2= 11.11%	11=36.67%	3=18.75%	8=42.11%	24			
	Collective (year)	6= 100%	16=88.89%	19=63.33%	13=81.25%	11=57.89%	65			
	Individual (articles)	0%	2.25%	12.36%	3.37%	8.99%	26.97%			
	Collective (articles)	6.74%	17.98%	21.35%	14.60%	12.36%	73.03%			

Focusing on the years, we can see several aspects. All the selected articles from the year 2009 are collective articles and these also represent 6.74% of the total of 89 articles. In the following year, although collective articles dominate (88.89%), the

numbers of individual articles represent a total of 11.11% of all the products of 2010. This year, individual articles represent 2.25% of the 89 articles and collective articles represent the 17.98% of the 89 articles. 2011 is the year when we can find more articles. Following with the same trend, collective articles are predominating with a percentage of 63.33% of all the articles of 2011, and against individual articles, representing 36.67% of the total products of the same year. Regarding the total of the 89 articles, the individual articles represent 12.36%, whereas the collective articles constitute 21.35% from this year. For the year 2012, also the collective articles (81.25% of total products of 2012) are superior to individual articles (18.75% of the total products of 2012), representing 3.37% and 14.60% respectively in the entirety of the 89 articles. Finally, in the year 2013, although the percentages are closed, the collective articles still dominate (57.89% of the total of products of the year 2013) to individual articles (42.11%). The percentage of the total of the 89 articles is an 8.99% of individual articles and 12.36% represent collective articles. With all this, we can conclude that although collective articles predominate over the years, as time is going by, the percentage of collective and individual articles is balancing. This evolution can be seen clearly in the graph that we can see below.

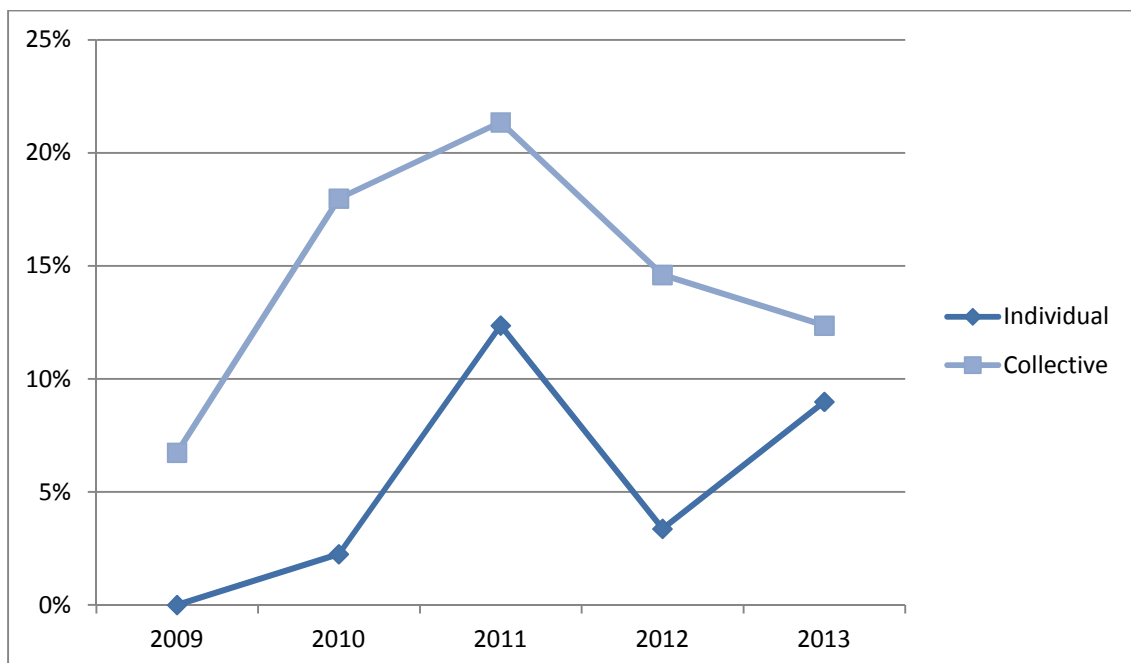


Figure 4. Evolution of the percentage that represents the individual and collective articles during the period 2009-2013.

Regarding the journal from which the articles come from, we can highlight that none of the articles of journals Academy of Management Perspectives, Academy of Management Review and Administrative Science Quarterly include any individual work, finding only individual works in the journal Academy of Management Journal (5.62% of all the 89 articles) and Asia Pacific Business Review (21.35% of the total of 89 articles). As we have mentioned earlier, these articles correspond to the 26.97% of the total of 89 articles. The remaining articles, the 73.03%, are collective articles. Of these, 22.45% are articles from Academy of Management Journal, 4.49% are articles from Academy of Management Perspectives, 1.12% are articles from Academy of Management Review, 2.16% are articles from Administrative Science Quarterly, and 42.69% are articles from Asia Pacific Business Review. Then, we can see these two graphs that allow us to see these data in a clear way.

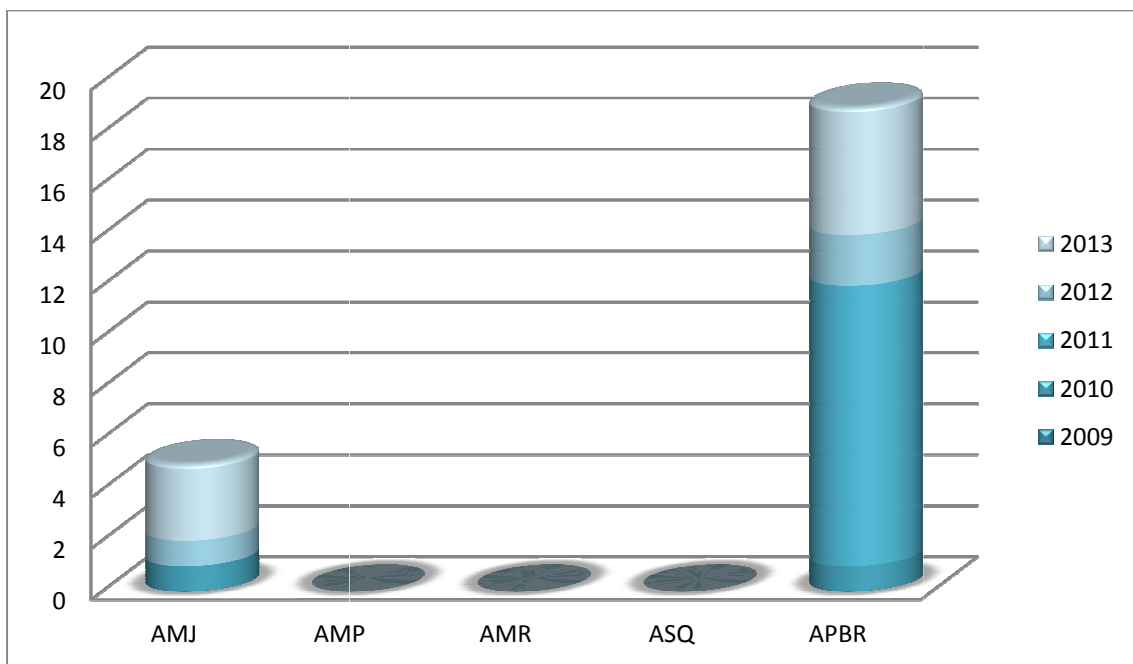


Figure 5. Number of Individual articles depending on journal and year.

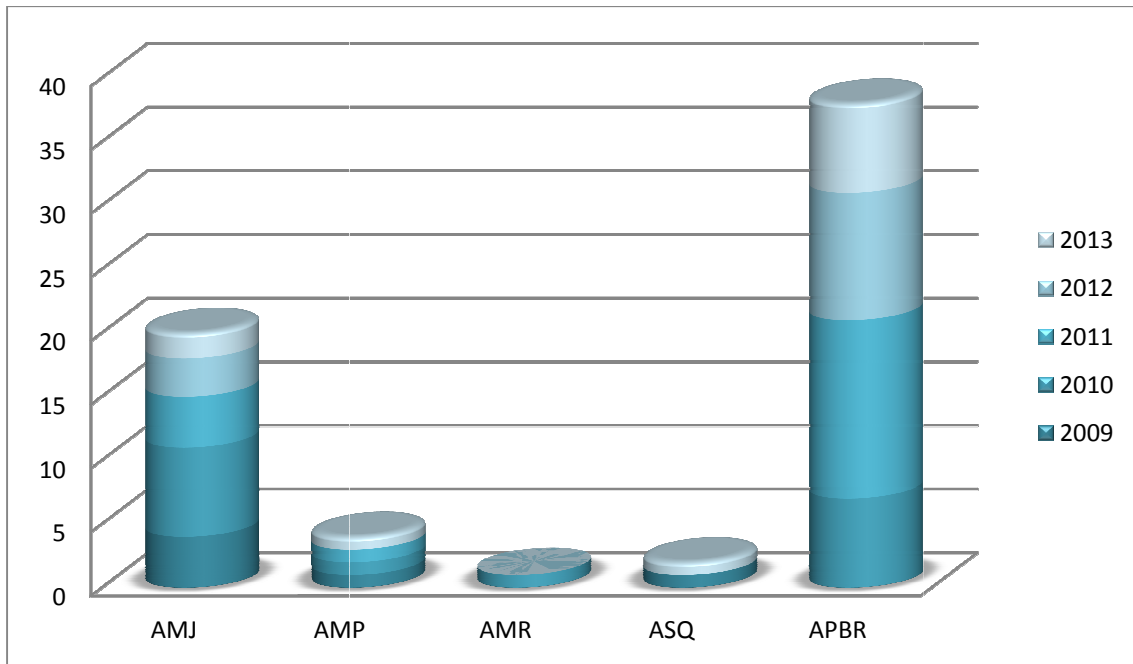


Figure 6. Number of collective articles depending on journal and year.

5.3. Concepts, theories and lines of Research

As for the lines of research, we can distinguish two points. Firstly, the lines of research in accordance with the concepts discussed and secondly, the lines of research by levels of analysis.

- By discussed concepts.

Next, we proceed to the study of the research lines identified in the study. This way, we have identified three lines of research: 1. Creativity; 2. Innovation; and 3. Creatividad and Innovation. Through this division we proceed to the classification of all the articles, and this allows us to do an in-depth study.

Table 6. Percentage of articles according to the word contained in the abstract (Creativity, Innovation, Creativity and Innovation).

JOURNAL	YEAR	CREATIVITY	INNOVATION	CREATIVITY AND INNOVATION	TOTAL
AMJ	2009	3	1	0	4
	2010	4	4	0	8
	2011	3	0	0	3
	2012	4	1	0	5
	2013	1	4	0	5
	Total	15	10	0	25
	%	60%	40%	0%	100%
AMP	2009	1	0	0	1
	2010	1	0	0	1
	2011	1	0	0	1
	2012	0	0	0	0
	2013	1	0	0	1
	Total	4	0	0	4
	%	100%	0%	0%	100%
AMR	2009	0	0	0	0
	2010	1	0	0	1
	2011	0	0	0	0
	2012	0	0	0	0
	2013	0	0	0	0
	Total	1	0	0	1
	%	100%	0%	0%	100%
ASQ	2009	0	1	0	1
	2010	0	0	0	0
	2011	0	1	0	1
	2012	0	0	0	0
	2013	0	0	0	0
	Total	0	1	0	1
	%	0%	100%	0%	100%
APBR	2009	0	0	0	0

	2010	0	8	0	8
	2011	2	20	2	24
	2012	1	12	0	13
	2013	1	11	0	12
	Total	4	51	2	57
	%	7.02%	89.47%	3.51%	100%
TOTAL		24	63	2	89
% / 89		26.96%	70.79%	2.25%	100%

The first line of research that we can obtain is the line of Creativity. In our database we can find a total of 24 articles that contained the word Creativity in the abstract. Of the total of 89 articles, these represent the 26.96%. The second line of research is Innovation. This line has the largest number of articles, a total of 63 articles, representing the 70.79% of the total of 89 articles. The last line of research, Creativity and Innovation, has only 2 articles, and for the total of 89 articles they represent the 2.25%. Therefore, we can carry out a number of conclusions. In the first place, we highlight the small number of articles that contain the word Creativity and Innovation in the abstract at the same time. We have only found two articles that contain both words in the total of the sample. On the other hand, we like to stand out that there are more articles that speak about Innovation than articles that speak about Creativity. A total of 63 articles that contain the word Innovation in the abstract, against a total of 24 articles containing the word Creativity in the abstract.

Next, we proceed to the analysis of the evolution of these lines of research. So, we have obtained the table below, which makes it easy a further analysis.

Table 7. Evolution of the lines of research and their corresponding percentage.

Year	CREATIVITY		INNOVATION		CREATIVITY AND INNOVATION		TOTAL
	Article	%	Article	%	Article	%	
2009	4	16.66%	2	3.17%	0	0%	6
2010	6	25%	12	19.05%	0	0%	18
2011	6	25%	21	33.34%	2	100%	29
2012	5	20.84%	13	20.63%	0	0%	18
2013	3	12.5%	15	23.81%	0	0%	18
Total	24	100%	63	100%	2	100%	89
%	26.96%		70.79%		2.25%		100%

In regards to the evolution of the research lines, we can stand out various aspects. As for the articles where the word Creativity appears on the abstract, we can see that the largest number of articles found in 2010 and 2011, a total of 6 articles for each year which represent half of all the articles containing the word Creativity in the abstract (2010 represents 25% and another 25% in 2011, representing 50% of all articles containing Creativity in the abstract). They are followed by the articles written in 2012, representing the 20.84%, and followed by articles that are written in 2009, which are the 16.66% and the articles that are written in 2013, representing a total of 12.5%. In regard to the articles that contain the word Innovation in the abstract, we can see a high percentage in 2011, with a total of 21 articles, which represent the 33.34%. Then, they are followed by the articles that are written in 2013, representing a total of 23.81%; articles written in 2012, a total of 20.63%; articles written in 2010, with a percentage of 19.05%; and finally, only two articles written in 2009, which represent the 3.17%. Concerning the research of Innovation and Creativity, as there are only two articles (100%) both written in 2011 we cannot appreciate an evolution. We can see it clearly in a chart that appears below.

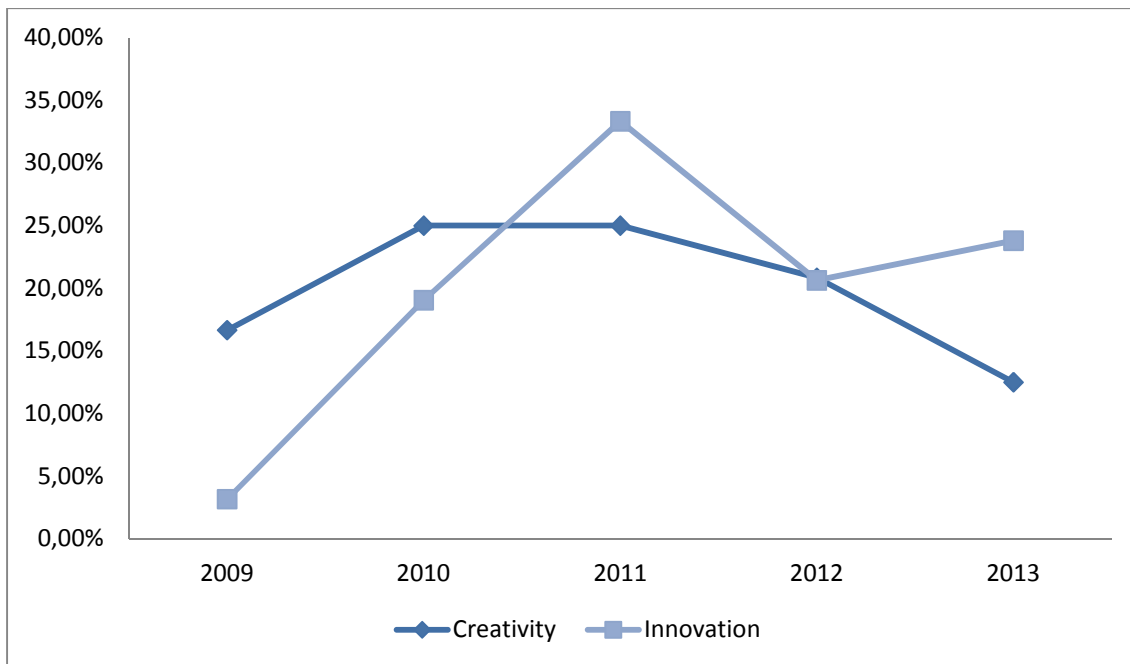


Figure 7. Evolution of the articles according to the word contained in the abstract (Creativity and Innovation). (* We dispense with the articles containing the words Creativity and Innovation together in the abstract, since there is no evolution because we have only found 2 articles in 2011 in the same journal)

In addition to its evolution, we can also analyse the lines of research according to the journal. There is a table with a summary of these data.

Table 8. Percentage of articles according to the word contained in the abstract (Creativity, Innovation, Creativity and Innovation) in relation to the journal.

JOURNAL		CREATIVITY	INNOVATION	CREATIVITY AND INNOVATION	TOTAL
AMJ	Total	15	10	0	25
	%	60%	40%	0%	100%
AMP	Total	4	0	0	4
	%	100%	0%	0%	100%
AMR	Total	1	0	0	1
	%	100%	0%	0%	100%
ASQ	Total	0	1	0	1
	%	0%	100%	0%	100%
APBR	Total	4	51	2	57
	%	7.02%	89.47%	3.51%	100%

From the journal Academy of Management Journal (AMJ), 15 articles out of 25 contain the word Creativity in the abstract (60%), 10 articles contain the word Innovation in the abstract (40%) and 0 contain both words Creativity and Innovation (0%). From the Journal Academy of Management Perspectives (AMP), all articles found (a total of four) contain the word Creativity in the abstract. In the journal Academy of Management Review (AMR), we have only found one article and it contains the word Creativity in the abstract. The same happens in the journal Administrative Science Quarterly (ASQ), in which there is only one article, but in this case, it contains the word Innovation in the abstract. Regarding the journal Asia Pacific Business Review 4 articles out of 57 contain the word Creativity in the abstract (7.02%), 51 contain the word Innovation in the abstract (89.47%) , and just 2 articles contain both words, Creativity and Innovation in the abstract (3, 51%). Let's see it more clearly in the graph below.

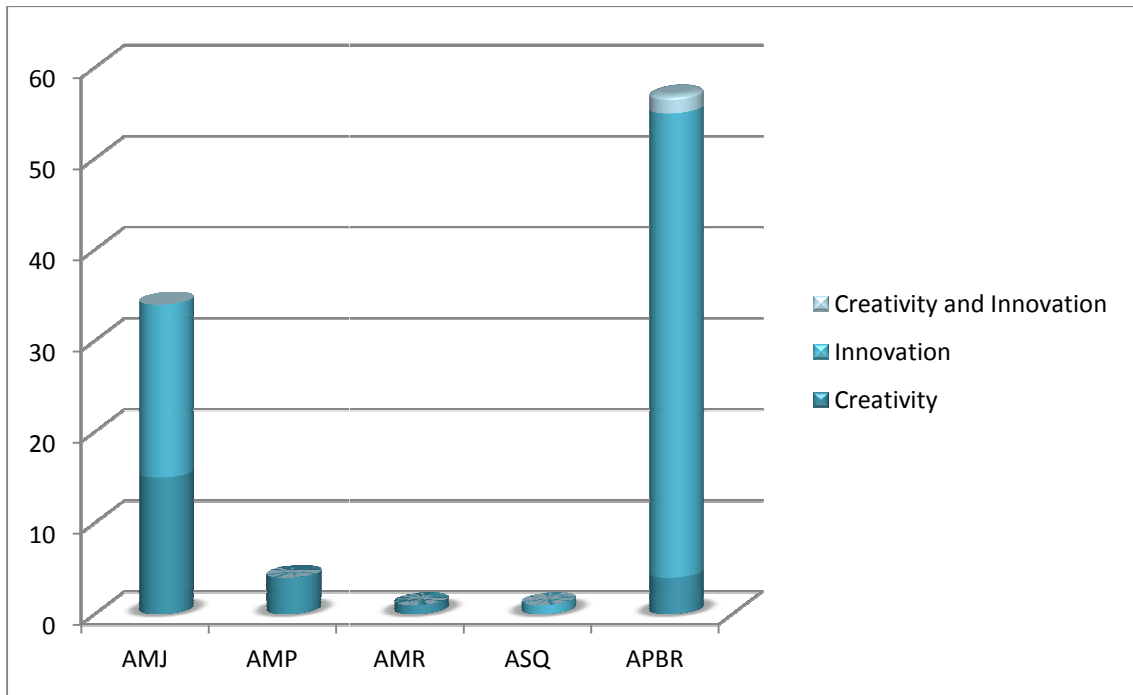


Figure 8. Classification of articles based on the word that is mentioned in the abstract (Creativity, Innovation, Creativity and Innovation) and according to the journal.

- By levels of analysis

Next, we carry out the analysis of the lines of research in terms of levels of analysis. Before beginning with this analysis, we have to note that to perform this analysis we have carried out a distinction between the research of articles that contain the word Creativity in the abstract and the research of articles that contain the word Innovation in the abstract.

First, we will proceed to an analysis of the lines of the research of the articles that contain the word Creativity in the abstract. In order to perform this analysis, we have counted on the table that appears below. We have obtained this table from the selected articles.

Table 9. Lines of research by levels of analysis: lines of research of the articles that contain the word Creativity in the abstract.

LEVELS OF ANALYSIS	ARTICLES: CREATIVITY	TOTAL	% /29
Individual	1,3,7,8,10,15,20,22,26,27,30,37	12	41.38%
Team	1,6,9,10,22,29	6	20.69%
Unit		0	0%
Firm/organization	4,13,15	3	10.34%
Environment	2,5,11,20,28,35,36,38	8	27.59%
TOTAL	24	29	100%

As we can see in the table, we have distinguished five different analysis levels: individual, team, unit, firm /organization, and environment. Once all selected articles have been analysed, we have obtained these lines of research and then we have proceeded to the classification of the articles depending on how each article defines the Creativity. We must clarify that some articles define creativity referring to different levels of set analysis; therefore, the same article may be classified into different levels.

In the Individual analysis level we speak of Creativity referring to the creation of new and useful ideas which only come from one individual. In this level we have found a total of 12 articles, which represent 35.29%.

In the Team analysis level we speak of Creativity referring to the creation of new and useful ideas by a group of individuals working together as a team. The total number of articles which define creativity in this way is 9, and they represent the 26.27%.

In the Unit analysis level we speak of Creativity referring to the creation of new and useful ideas within a same department. We have only found one article, and it represents 2.94%.

In the Firm / Organization analysis level we speak of Creativity referring to the creation of new useful ideas by an organization, that is to say that creativity will emerge or appear among the employees if there is an atmosphere in the company or the

organization that promotes it. Within this level, we have found a total of 3 articles that talk about creativity in these terms. Their percentage is 8.83%

In the Environment analysis level we speak of Creativity referring to the creation of new and useful ideas in both the short and the long term occurring in an environment; that is to say, depending on the characteristics of an environment, it may or may not give rise to the creation of new ideas. Within this classification we find a total of 9 articles speaking about creativity in this way, representing a total of 26.47%.

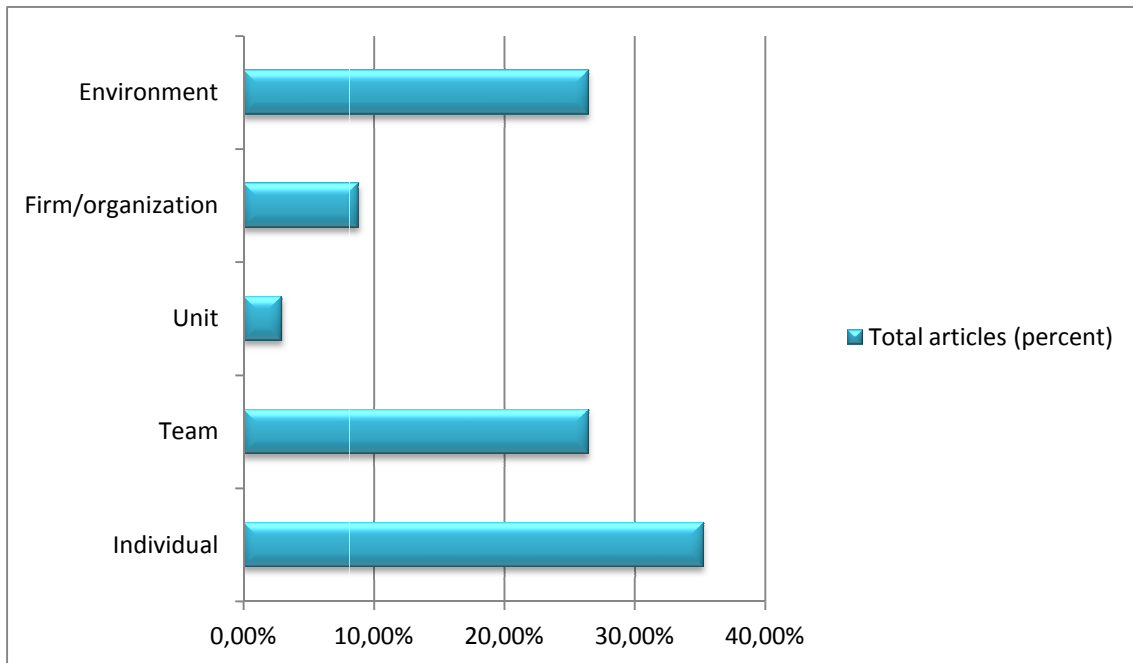


Figure 9. Percentage of the total classified articles according to the levels of analysis determined in the analysis of the lines of research.

Finally, we want to note that some articles that speak of creativity use several lines of research. There are seven articles in total (Article 1, Article 3, Article 5, Article 7, Article 10, Article 15, Article 22) that use different levels of analysis. Of these seven articles, there are four which speak of Creativity referring to the levels of analysis Individual and Team (Article 1, Article 7, Article 10, Article 22). On the other hand, we find another article (Article 15) which uses the following research lines to discuss Creativity: Single, Team, Unit, and Firm / Organization. In addition, there are two articles (Article 3, Article 20) which use the Single line research and the Environment line research to speak about creativity. Finally, we get an article (Article 5), which uses the Team research line and the Environment research line to speak of Creativity.

Secondly, we are going to carry out an analysis of the research line of the articles that contain the word Innovation in the abstract. As in the previous case, we count on the table below which has been obtained from the selected articles.

Table 10. Lines of research by levels of analysis: line of research of articles containing the word Innovation in the abstract.

LEVELS OF ANALYSIS	ARTICLES: INNOVATION	TOTAL	% /80
Individual	16, 18, 61, 65	4	5%
Team	18, 21, 23, 25, 61	5	6.25%
Unit	18, 21, 23, 25, 61	5	6.25%
Firm/organization	14, 17, 18, 19, 32, 43, 52, 56, 57, 59, 61, 63, 64, 67, 75, 76, 78, 85	18	22.5%
Environment	12, 16, 18, 24, 32, 33, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 53, 54, 55, 58, 60, 61, 62, 63, 65, 66, 67, 68, 70, 71, 72, 73, 74, 75, 77, 79, 80, 81, 82, 83, 84, 86, 78, 80, 89	48	60%
TOTAL		80	100%

As in the previous case, we have distinguished between five levels of analysis: individual, team, unit, firm / organization, and environment.

In the Individual analysis level we speak of Innovation referring to the introduction of a change or of new proposals and inventions that arise by a single individual and they introduce new features. In this level we have found a total of 4 articles, which represent 5%.

In the Team analysis level we speak of Innovation referring to the introduction of a change or of new inventions and proposals coming from a group of people or from a team and they introduce new features. The total number of articles that defined in this way innovation is 5, and they represent 6.25%.

In the Unit analysis level we speak of Innovation referring to the introduction of a change or of new proposals and inventions from introducing by a department and introducing new features. We found 5 articles, and these accounted for 6.25%.

In the Firm / Organization analysis level we speak of Innovation referring to the introduction of a change or new proposals and inventions which come from an organization or company and which introduce new features. Within this level, we have found a total of 18 articles that speak about innovation in these terms. Their percentage is 22.5%.

In the Environment analysis level we speak of Innovation referring to the introduction of a change or of new proposals and inventions which are generated in an environment and which introduce new features. Within this classification, we have found a total of 48 articles, representing a total of 60%.

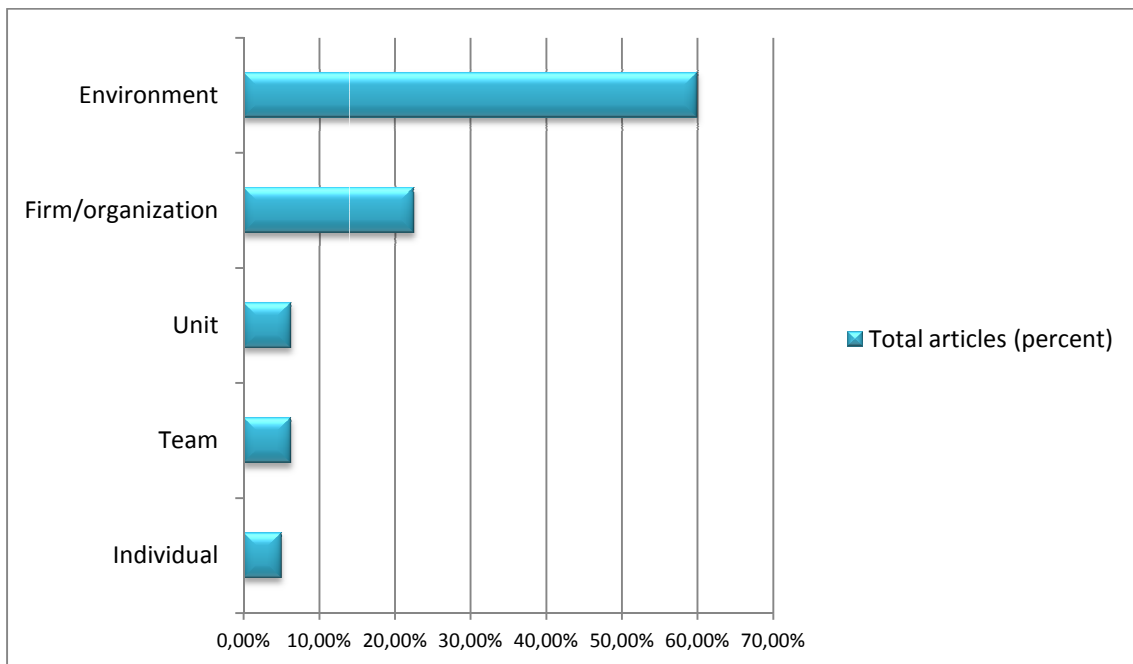


Figure 10. Percentage corresponding to the total classified articles according to the levels of analysis determined in the analysis of the lines of research.

Finally, we want to note that some articles that speak about the Innovation use various lines of research. In total we have found nine articles (Article 18, paper21, Article 23, Article 25, Article 32, Article 61, Article 63, Article 65, Article 67) that use different levels of analysis. Of these nine articles we find two articles (Article 18, Article 61) that use the five levels of analysis: Individual, Team, Unit, Firm / Organization, and

Environment. We find just one article (Article 65) that uses the Individual level of analysis and the Environment level of analysis. On the other hand, there are three articles (Article 21, Article 23, Article 25) that use both the Team level analysis and the Unit level of analysis to discuss about innovation. Finally, there are three other articles (Article 32, Article 63, Article 67) that also use two levels of analysis, the Firm and the Environment level of analysis to discuss innovation.

Thirdly, we will carry out an analysis of the research articles that contain the word Innovation and Creativity in the abstract. We will also use the table shown below.

Table 11. Research lines by levels of analysis: line of research of articles containing the word Innovation and Creativity in the abstract

LEVELS OF ANALYSIS	ARTICLES: CREATIVITY AND INNOVATION	TOTAL	% / 4
Individual	34, 69	2	50%
Team	34, 69	2	50%
Unit	0	0	0%
Firm/organization	0	0	0%
Environment	0	0	0%
TOTAL	2	4	100%

As we can see, both articles use the levels of Individual and Team analysis to discuss both concepts, Creativity and Innovation. Therefore, the Individual level analysis represents 50% versus 50% that represents the Team level analysis. The remaining levels represent 0%.

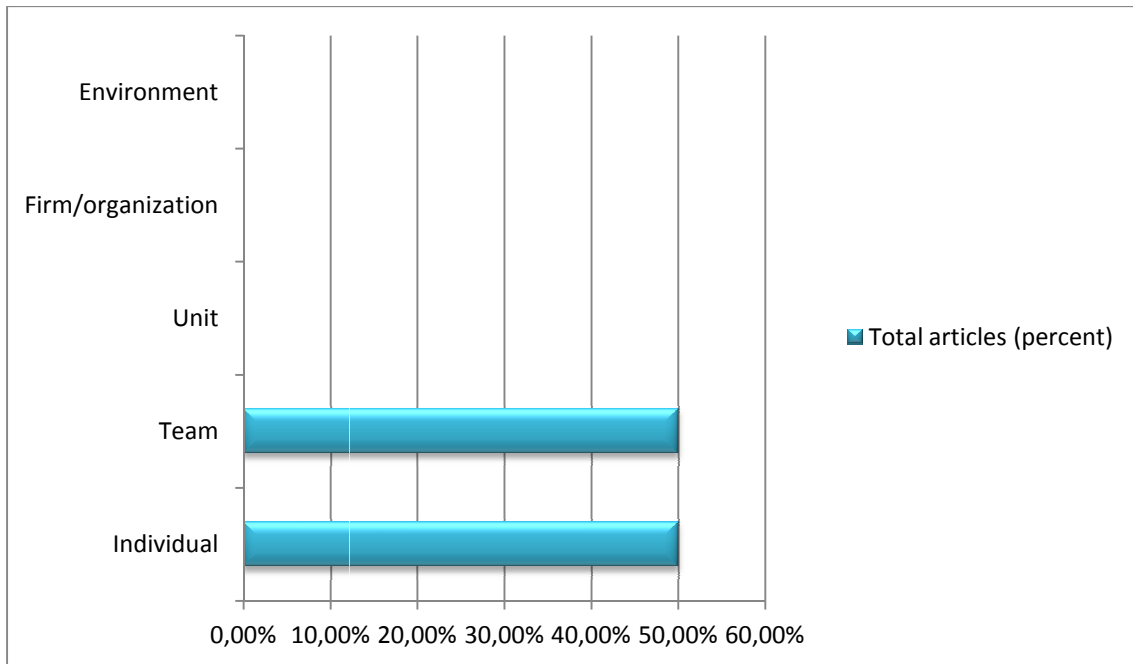


Figure 11. Percentage corresponding to the total classified articles according to levels of analysis determined in the analysis of the lines of research.

5.4. Methodology and characteristics of research

Once we have analysed the evolution of the scientific nature of the work, as well as the existence or not of research groups and lines of research, now we are proceed to the evaluation of the methodologies and characteristics of the research.

In this section we are proceeding to the analysis of articles in order to determine the methodologies used, through several elements such as the type of work, the information sources, the temporal and geographic scope, etc.

In order to do this, we can see a summary of the methodology and the characteristics of the research, in the table below.

Table 12. Methodology and characteristics of the research and its corresponding percentage

		2009	2010	2011	2012	2013	TOTAL	% /38	% /89	TOTAL	%
Conceptual	Conceptual	0	2	6	4	6	18	47.37%	20.22%	38	42.69%
	Descriptive	1	5	7	1	6	20	52.63%	22.47%		
Empiric	Qualitative	1	4	8	3	5	21	41.18%	24.71%	51	57.31%
	Quantitative	4	7	9	8	2	30	58.82%	31.47%		
TOTAL		6	18	30	16	19	89		100%	89	100%

In the first place, as mentioned above, the results indicate that the empirical work predominate over the conceptual work. The empirical works represent 57.31% from the total of the 89 articles versus the 42.69% which represent the conceptual works.

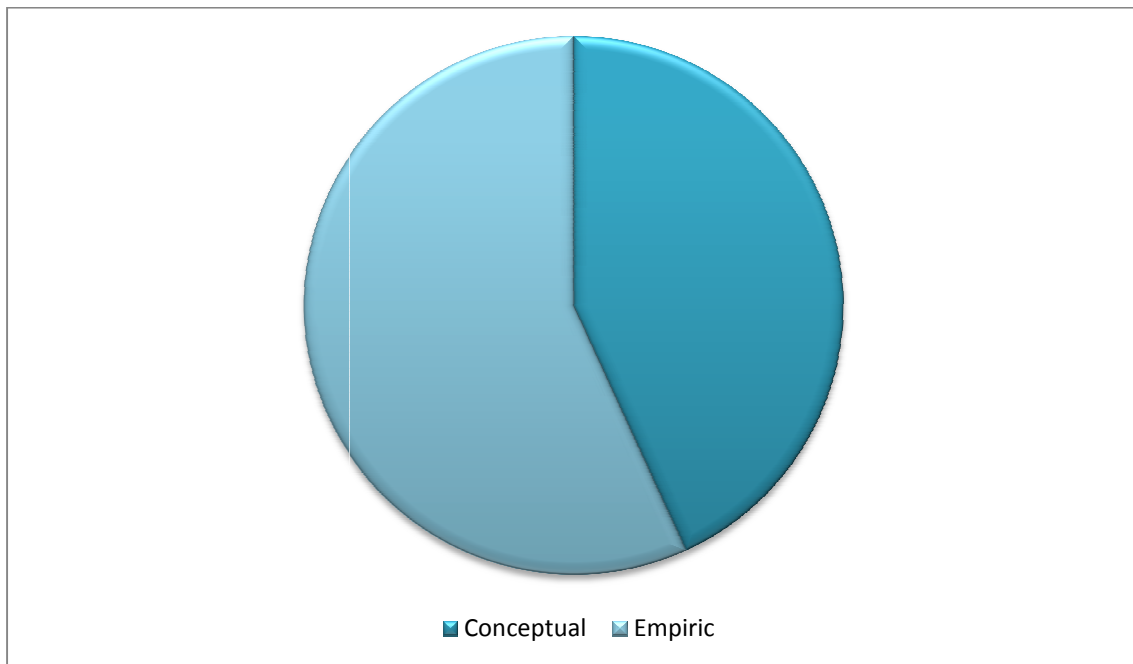


Figure 12. Percentage of empirical and conceptual works.

Within the conceptual works, we can distinguish between the purely conceptual works, or the descriptive works. The descriptive works are those that use some descriptive data; that is to say, they do not carry out any type of research but they use some data to certify their work.

Of the total of 89 articles (42.96% corresponds to the conceptual work), the 20.22% is purely conceptual work, which is not based on any data and they simply set their theories. The remaining 22.47% is descriptive conceptual work; it uses some of the data to support its theories. Therefore, most of the conceptual works (52.63% of the total of 38 conceptual articles) are conceptual descriptive works, the remaining ones (47.37% of the total of 38 conceptual articles) are purely conceptual.

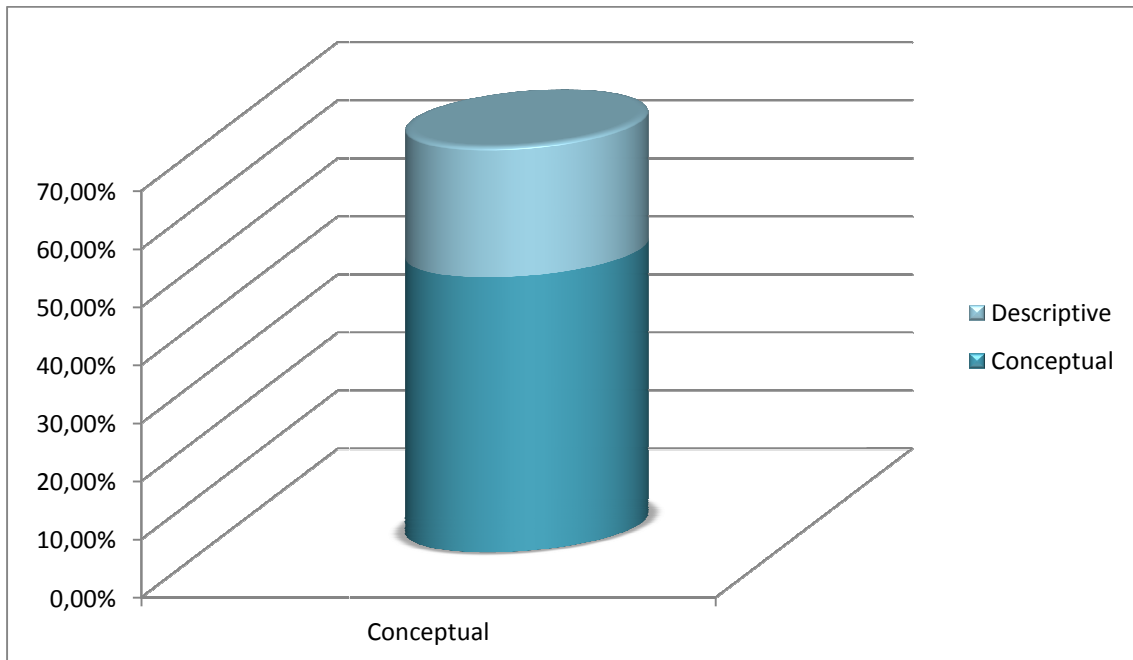


Figure 13. Percentage of conceptual and descriptive works of all the 38 conceptual articles.

As regards the empirical work, we also make a distinction between the qualitative works and the quantitative works. Qualitative empirical studies are based on data collection without numerical measurement, while quantitative works involve numbers and statistics. That is, as the qualitative works try to help to understand a hypothesis, the quantitative work creates and test hypotheses and makes predictions. Of the total of 89 articles (57.31% correspond to empirical studies), the qualitative empirical works have a percentage of 24.71%, compared to the quantitative empirical studies that are

the 31.47%. Therefore, most of the empirical studies are quantitative (a total of 58.82% out of the 51 empirical articles), and they are followed by the qualitative work (a percentage of 41.18% out of the 51 empirical articles).

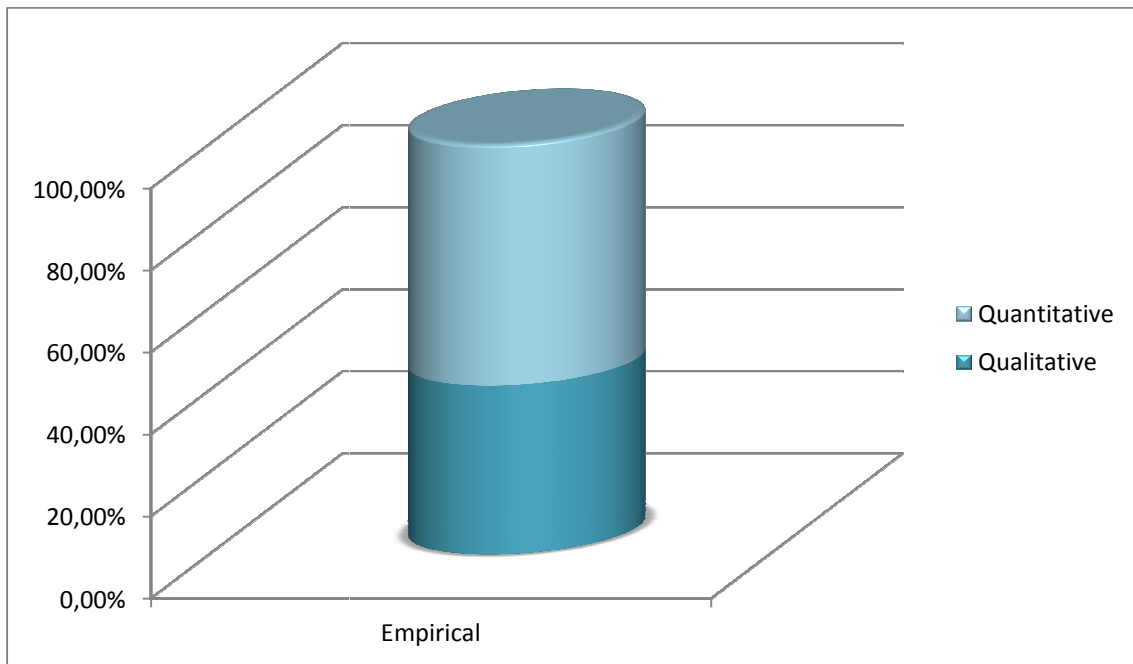


Figure 14. Percentage of qualitative and quantitative studies of the total of the 51 empirical articles.

Next, we proceed to the analysis of quantitative empirical articles, determining the sample, the data source and the techniques. In the table below, we can see all the quantitative articles, forming a total of 30 articles. As we can see, the survey has been used on all articles to carry out the analysis. As we can see, in all the articles they have used the survey to conduct the analysis. On the other hand, for the sample used for each article we can be deduced that the most surveys have been made to employees in companies, but also include survey performed to consumer, academics, supervisors, etc.. Respect to the techniques carried out in analysis, stand out the use of Hierarchical Linear and Regression Analyses.

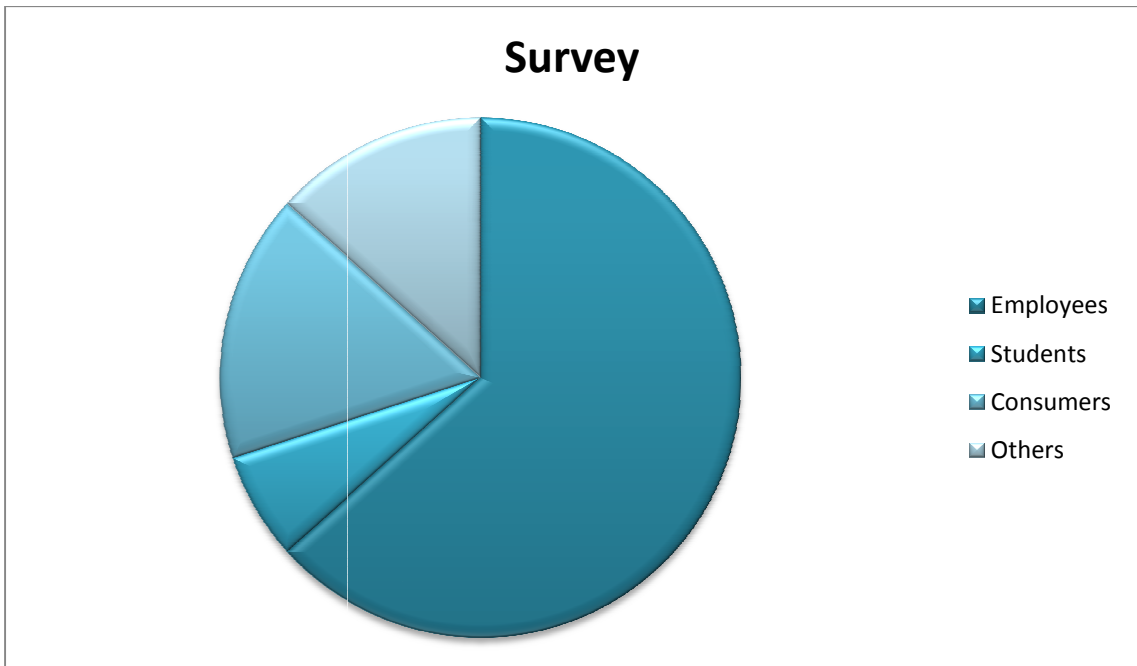


Figure 15. Recipients of the surveys made in quantitative empirical articles.

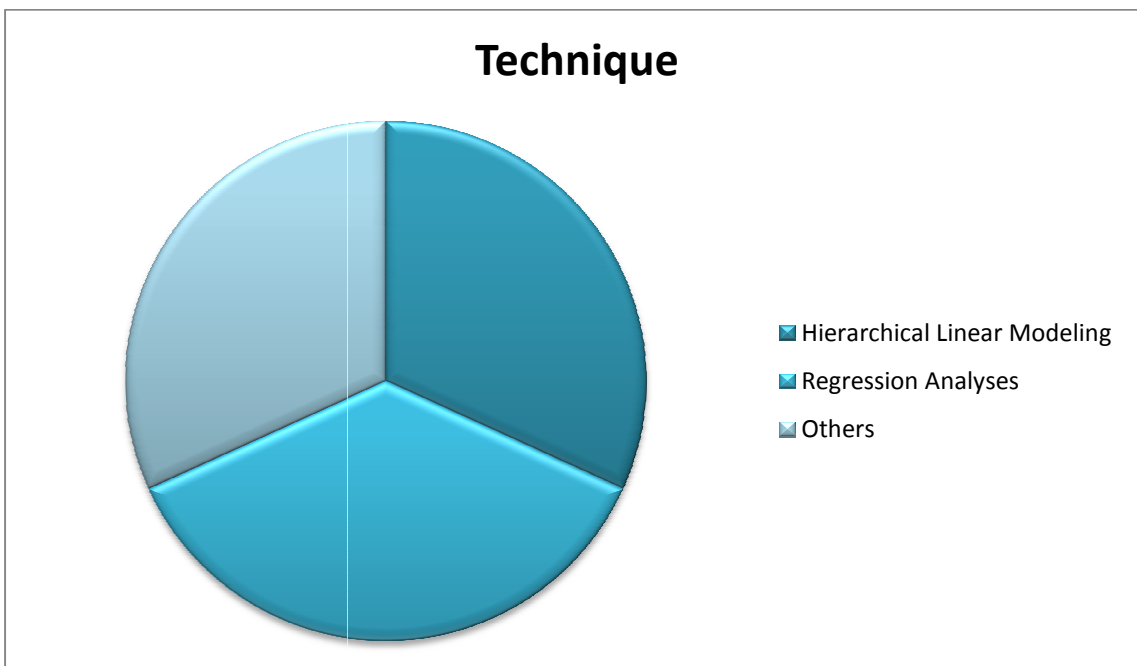


Figure 16. Techniques used in the quantitative empirical articles.

Next, we can see the following table that shows all the data used for the previous analysis, specifying the sample, the data source and the technique.

Table 13. Analysis of the quantitative empirical articles, indicating the sample, the data source and the technique

ARTICLE 1: A Multilevel Model of Team Goal Orientation, Information Exchange, and Creativity	
SAMPLE	We collected data from 100 R&D teams in 19 Korean companies
DATA SOURCE	ENCUESTA/ SURVEY
TECHNIQUE	Hierarchical Linear Modeling
ARTICLE 2: Putting Creativity to Work: The Implementation of Creative Ideas in Organizations	
SAMPLE	Hypotheses were tested in a sample of employees from a large global agricultural processing firm. In total, 531 employees and 111 supervisors were identified.
DATA SOURCE	SURVEY
TECHNIQUE	Regression Analyses for Implementation
ARTICLE 3: A Dynamic Perspective on Affect and Creativity	
SAMPLE	We recruited a heterogeneous sample of full-time employees in professional jobs to allow for generalization across jobs and industries. We contacted 140 people in this way; 116 agreed to participate in the study.
DATA SOURCE	SURVEY
TECHNIQUE	Hierarchical Linear Models with Creativity as the Dependent Variable

ARTICLE 4: Self-Regulation of Creativity at Work: The Role of Feedback-Seeking Behavior in Creative Performance

SAMPLE	The sample consisted of 456 supervisor-subordinate dyads from four consulting firms, each employing between 300 and 800 employees
DATA SOURCE	SURVEY
TECHNIQUE	Comparison of structural baseline model to alternative models

ARTICLE 6: Cognitive Team Diversity and Individual Team Member Creativity: A Cross-Level Interaction

SAMPLE	Data were collected from subordinates and their supervisors from 68 teams in three large organizations located in the northern part of the Republic of China
DATA SOURCE	SURVEY
TECHNIQUE	Results of Hierarchical Linear Modeling

ARTICLE 7: A Cross-Level Perspective on Employee Creativity: Goal Orientation, Team Learning Behaviour, and Individual Creativity

SAMPLE	We collected data as part of a cross-national R&D leadership development initiative in a large pharmaceutical company. This procedure helped us to recruit 25 program teams comprising 255 employees based at four research divisions in three countries (the United States, the United Kingdom, and Sweden).
DATA SOURCE	SURVEY
TECHNIQUE	Results of Hierarchical Linear Modeling for Effects on Employee Creativity of Cross-Level Interactions of Goal Orientation with Team Learning

ARTICLE 8: How Does Bureaucracy Impact Individual Creativity? A Cross-Level Investigation of Team Contextual Influences on Goal Orientation–Creativity Relationships

SAMPLE	In total, 388 employees completed questionnaires containing the independent variables, and 97 team leaders rated employee creativity.
DATA SOURCE	SURVEY
TECHNIQUE	HLM Results for the Effects of Cross-Level Interactions of Goal Orientation with Team Bureaucracy on Employee Creativity

ARTICLE 10: Linking Empowering Leadership and Employee Creativity: The Influence of Psychological Empowerment, Intrinsic Motivation, and Creative Process Engagement

SAMPLE	The 498 usable employee survey responses received constituted a 74.3 percent response rate. Upon receipt of employee responses, we contacted the 219 relevant direct supervisors. We received useful responses from 164 direct supervisors, for a 74.9 percent response rate. Finally, we were able to match 367 usable responses from both direct supervisors and employees.
DATA SOURCE	SURVEY
TECHNIQUE	Summary of Model Fit Indexes

ARTICLE 11: The Necessity of Others is The Mother of Invention: Intrinsic and Prosocial Motivations, Perspective Taking, and Creativity

SAMPLE	We collected motivation data from 90 security force officers and collected lagged creativity ratings from their
--------	---

	supervisors at a military base in the Northwestern United States.
DATA SOURCE	SURVEY
TECHNIQUE	Moderated Regression Analyses Predicting Creativity
ARTICLE 12: The Effect of Conformist and Attentive-To-Detail Members on Team Innovation: Reconciling the Innovation Paradox	
SAMPLE	We collected data on 20 R&D teams (331 participants) and 21 manufacturing teams (137 participants).
DATA SOURCE	SURVEY
TECHNIQUE	Regression Analysis of Radical Innovation and Cognitive Styles
ARTICLE 13: Employee Learning Orientation, Transformational Leadership, and Employee Creativity: The Mediating Role of Employee Creative Self-Efficacy	
SAMPLE	For the main study, we selected 277 insurance agents out of a total of 554 possible agents by randomly picking every other name from a list.
DATA SOURCE	SURVEY
TECHNIQUE	Results of Hierarchical Linear Modeling for Employee Job Performance
ARTICLE 15: Looking at Both Sides of the Social Exchange Coin: A Social Cognitive Perspective on the Joint Effects of Relationship Quality and Differentiation on Creativity	
SAMPLE	In phase 1, we administered questionnaires to all the 1,380 technicians of the company's 153 technical support teams. In phase 2, we asked the 1,005 responding technicians to evaluate their

	<p>self-efficacy once again and received 828 evaluations from 116 teams,</p> <p>In phase 3, the HR department provided us with data on the creativity bonuses that 828 technicians had received during the six-month survey period.</p> <p>The final sample of 828 technicians on 116 teams.</p>
DATA SOURCE	SURVEY
TECHNIQUE	HLM Results: Main and Interactive Effects

ARTICLE 17: Activating Cross-Boundary Knowledge: The Role of Simmelian Ties in the Generation of Innovations

SAMPLE	We collected questionnaire and archival data on 276 respondents
DATA SOURCE	SURVEY
TECHNIQUE	Results of Negative Binomial Regression Analysis Clustered by Labs

ARTICLE 18: Innovative Behaviour in the Workplace: The Role of Performance and Image Outcome Expectations

SAMPLE	We surveyed 425 full-time employees and their 96 direct supervisors from four U.S. companies in several different industries
DATA SOURCE	SURVEY
TECHNIQUE	Other

ARTICLE 20: Interactive Effects of Growth Need Strength, Work Context, and Job Complexity On Self-Reported Creative Performance

SAMPLE	Complete interview data were obtained from 1,465 individuals.
DATA SOURCE	SURVEY

TECHNIQUE	Results of Regression Analysis
ARTICLE 22: The Effects of Conflict Asymmetry on Work Group and Individual Outcomes	
SAMPLE	We tested our hypotheses in 51 organizational work groups comprising 167 employees from nine engineering firms (82%) and four investment banks (18%).
DATA SOURCE	SURVEY
TECHNIQUE	Results of Hierarchical Regression Analysis for Group Conflict Asymmetry
ARTICLE 23: Top Management Attention to Innovation: The Role of Search Selection and Intensity in New Product Introductions	
SAMPLE	The sample for our study was TMTs in 61 public, high-technology companies located in the mid-Atlantic region of the United States.
DATA SOURCE	SURVEY
TECHNIQUE	Negative Binomial Regression Predicting Number of New Products
ARTICLE 26: Self-Regulation of Creativity at Work: The Role of Feedback-Seeking Behaviour in Creative Performance	
SAMPLE	The sample consisted of 456 supervisor-subordinate dyads from four consulting firms, each employing between 300 and 800 employees.
DATA SOURCE	SURVEY
TECHNIQUE	Comparison of the Baseline Structural Model to Alternative Models

ARTICLE 27: The Necessity of Others is The Mother of Invention: Intrinsic and Prosocial Motivations, Perspective Taking, and Creativity

SAMPLE	<p>Study 1. We collected motivation data from 90 security force officers and collected lagged creativity ratings from their supervisors at a military base in the northwestern United States.</p> <p>Study 2. We collected data from 111 employees and their direct supervisors at a water treatment plant in the southeastern U.S.</p>
DATA SOURCE	SURVEY
TECHNIQUE	<p>Study 1. Moderated Regression Analyses Predicting Creativity</p> <p>Study 2. Regression Analyses</p>

ARTICLE 28: From a mirage to an oasis: narcissism, perceived creativity and creative performance.

SAMPLE	<p>Study 1. Participants were 244 undergraduates from a large university on the east coast of the United States who participated in exchange for partial course credit.</p> <p>Study 2. Participants were 76 students from a large university on the west coast of the United States who completed the study in exchange for course credit.</p> <p>Study 3. Participants were 292 undergraduate students from an introductory course in organizational psychology who completed the study for partial course credit.</p>
DATA SOURCE	SURVEY
TECHNIQUE	Other

ARTICLE 30: A Cross-Level Perspective on Employee Creativity: Goal Orientation, Team Learning Behaviour, and Individual Creativity	
SAMPLE	This procedure helped us to recruit 25 program teams comprising 255 employees based at four research divisions in three countries (the United States, the United Kingdom, and Sweden).
DATA SOURCE	SURVEY
TECHNIQUE	Results of Hierarchical Linear Modeling for Effects on Employee Creativity of Cross-Level Interactions of Goal Orientation with Team Learning
ARTICLE 34: Effects of transformational and transactional leadership on employees' creative behaviour: mediating effects of work motivation and job satisfaction	
SAMPLE	There were 559 usable questionnaires for the data analysis.
DATA SOURCE	SURVEY
TECHNIQUE	Other
ARTICLE 48: Environmental Innovations, Local Networks and Internationalization	
SAMPLE	The dataset used in this paper is based on information drawn from a very rich and detailed survey conducted in ER on a sample of 555 manufacturing firms with more than 20 employees.
DATA SOURCE	SURVEY
TECHNIQUE	Other
ARTICLE 51: Principal sustainability components: empirical analysis of synergies between the three pillars of sustainability	
SAMPLE	A total of 1081 students of Environmental Sciences graduated from

	ETH between 1992 and 2005. More than half of them (N = 567) visited the survey webpage and responded at least to the first question.
DATA SOURCE	SURVEY
TECHNIQUE	Other

ARTICLE 56: Assessing the moderating effect of innovation capability on the relationship between logistics service capability and firm performance for ocean freight forwarders

SAMPLE	The total number of usable responses was 75, and the overall response rate was 18.5%.
DATA SOURCE	SURVEY
TECHNIQUE	Multiple regression analysis results Multiple moderated regression results.

ARTICLE 59: Evaluation of Critical Success Factors for Developing Small and Medium-Sized Enterprises in Botswana

SAMPLE	A total of 119 respondents were interviewed by a team of four research assistants from Boteti (71.4%) and Gaborone (27.6%) using closed-ended questionnaire.
DATA SOURCE	SURVEY
TECHNIQUE	Simple Regression Results for Entrepreneurial Motives and Managers' Attitudes

ARTICLE 65: Leisure innovation among post-retirement women in north-eastern China

SAMPLE	We conducted in-depth, semi-structured interviews with 18 Chinese women aged between 60 years and 81 years.
--------	---

DATA SOURCE	ENCUESTA/ SURVEY
TECHNIQUE	Other
ARTICLE 69: Effects of transformational and transactional leadership on employees' creative behaviour: mediating effects of work motivation and job satisfaction	
SAMPLE	A total of 610 employees participating in a company-wide training programme took part in this study. A total of 51 questionnaires were excluded because of a large number of missing items, and there were 559 usable questionnaires for the data analysis.
DATA SOURCE	SURVEY
TECHNIQUE	Other
ARTICLE 75: Are the effects of conscientiousness on contextual and innovative performance context specific? Organizational culture as a moderator	
SAMPLE	The final sample consisted of 176 employees and 92 immediate managers
DATA SOURCE	SURVEY
TECHNIQUE	Hierarchical regression examining the moderating role of organizational culture.
ARTICLE 86: Life insurance and income growth: the case of Sweden 1830–1950	
SAMPLE	--
DATA SOURCE	SURVEY
TECHNIQUE	Other

In regard to the sources of information, we can distinguish between primary information sources and secondary information sources. The primary information sources are those that have original data, which are published for the first time, which have never been evaluated before and which arise as a result of an investigation. The secondary sources are those containing primary data, that is to say, that have previously been

worked. In our study, we can see that most of the information is primary information, that is to say, that a research has been carried out to collect it. It represents 66.07% compared to 33.93% that represents secondary information.

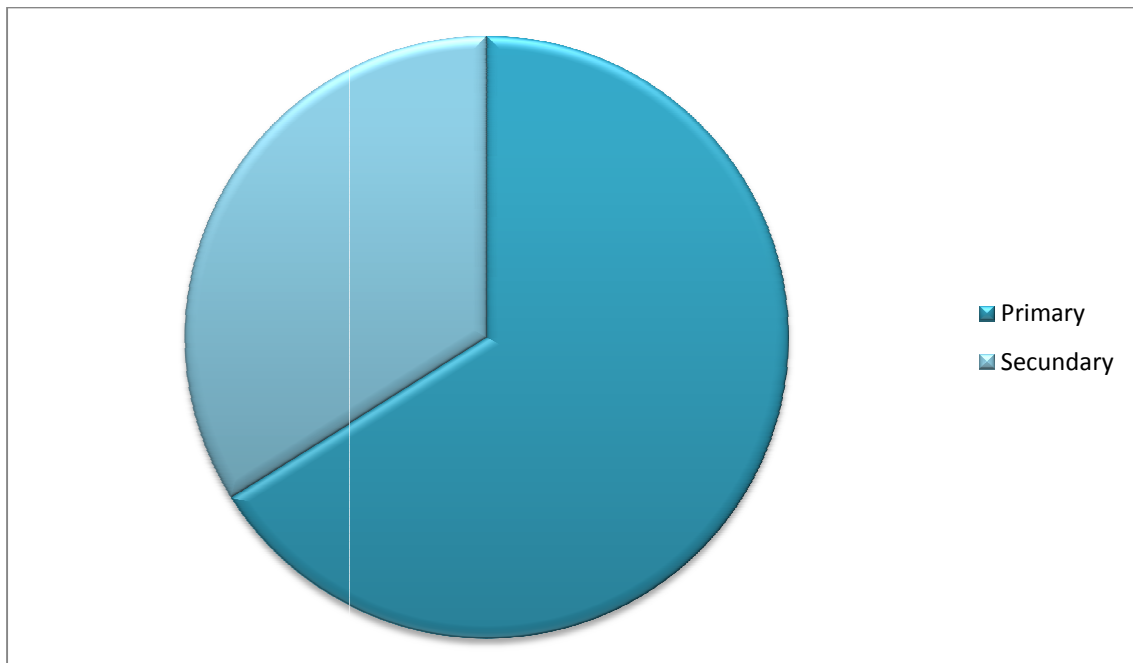


Figure 17. Percentage of the articles that use primary information from total percentage of articles that use secondary sources.

Regarding journals, we can also see that information got through primary sources prevails over information got through secondary sources. Regarding the Academy Of Management Journal (JMA), the percentage of articles which use primary sources is 35.71% of 56 articles, while the percentage of articles that use secondary source is 12.5% of 56 articles. The primary articles of this journal selected for sample represent 74.07% versus 25.93% that represents the secondary articles. In the journal Academy of Management Perspectives (AMP), only primary sources are used (100%), they represent 7.14% of the total of 56 articles. In the Asia Pacific Business Review journal (APBR), the percentage of articles that use primary sources is 23.22% of all the 56 articles compared to 21.43% that uses secondary sources. Of all the articles of this journal, 52% are primary and 48% are secondary. Below we can see a table and a chart with the entire data sample previously analysed.

Table 14. Primary or secondary sources of information according to the journal and to their corresponding percentage.

JOURNAL	PRIMARY	SECONDARY	% PRIM. /56	%SEC./56	% PRIMA. JOURNAL	% SEC. JOURNAL
AMJ	20	7	35.71%	12.5%,	74.07%	25.93%
AMP	4	0	7.14%	0%	100%	0%
AMR	0	0	0%	0%	0%	0%
ASQ	0	0	0%	0%	0%	0%
APBR	13	12	23.22%	21.43%	52%	48%
TOTAL	37	19	56			
%	66.07%	33.93%	100%			

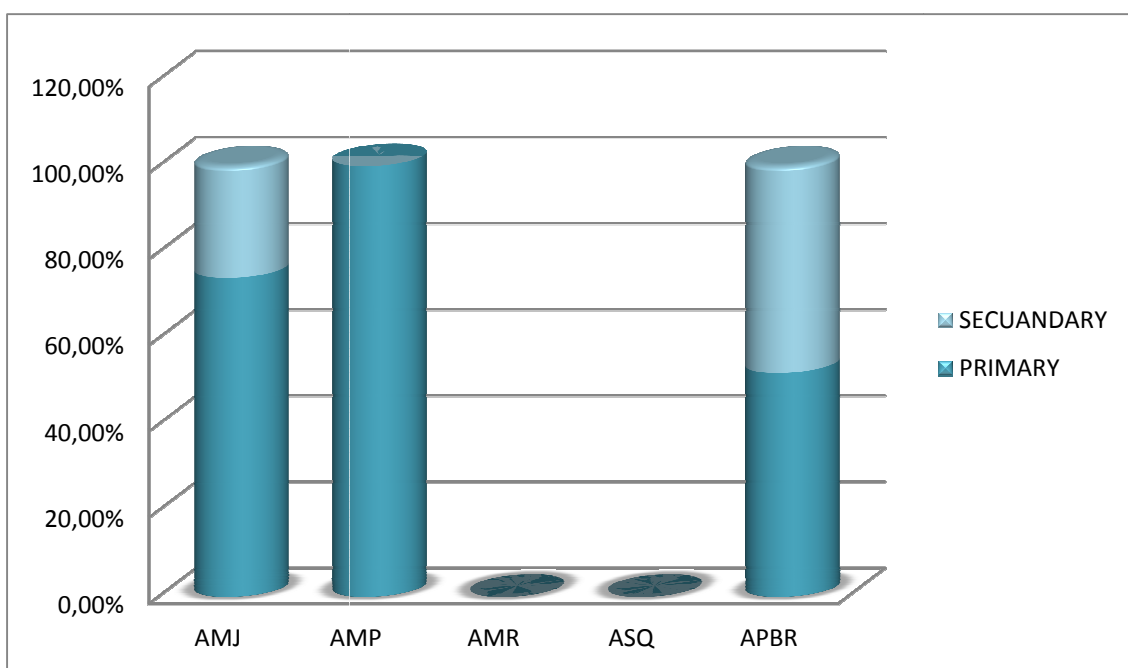


Figure 18. Percentage of articles that use primary or secondary sources depending on the journal

On the other hand, we can carry out an analysis of the geographical and temporal scope. To carry out this analysis, we need the tables and graphs below.

At first, we have focused on the analysis of the geographical area.

Table 15. Geographical scope of the articles analysed according to the journal and its corresponding percentage.

JOURNAL	GEOGRAPHICAL SCOPE	
	NATIONAL	INTERNATIONAL
AMJ	0	25
AMP	0	4
AMR	0	1
ASQ	0	2
APBR	0	57
TOTAL	0	89
%	0%	100%

In terms of geographical scope, we can distinguish between national geographical area and international geographical area. The National geographical area would consist of those articles written in Spain, while international geographical area would consist of those articles written outside Spain.

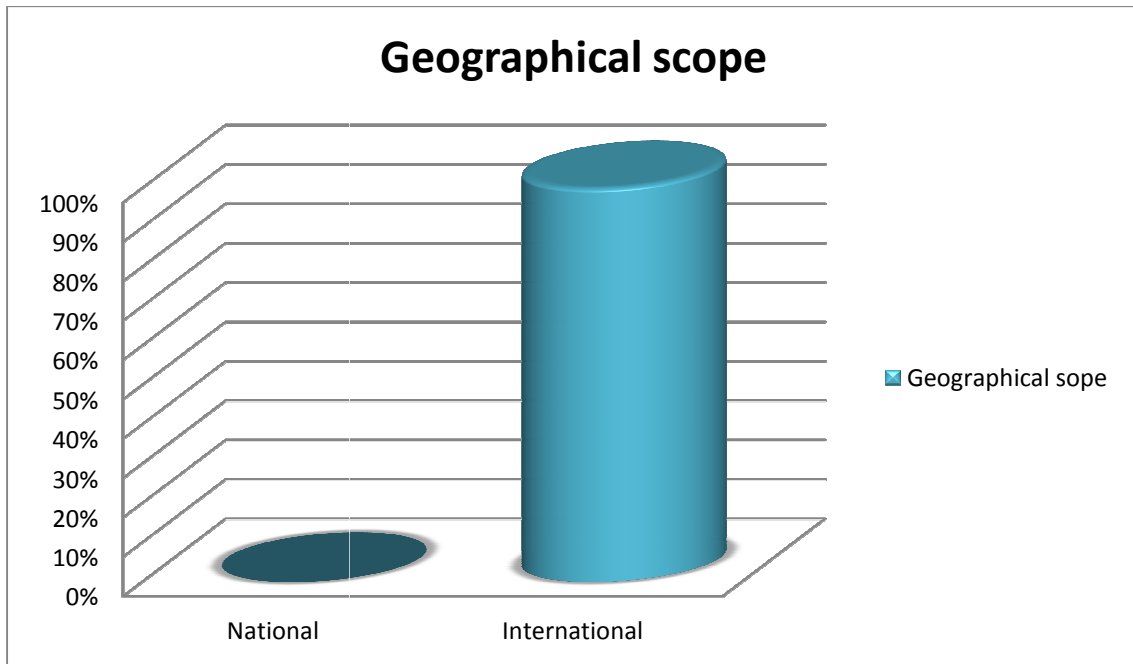


Figure 19. Percentage of works depending on the geographical area (national and international).

We proceed now to do the analysis of the temporal sphere.

Table 16. Temporal scope of the articles analysed according to the journal and its corresponding percentage.

JOURNAL	TEMPORAL SCOPE	
	LONGITUDINAL	TRANSVERSAL
AMJ	0	25
AMP	0	4
AMR	0	1
ASQ	0	2
APBR	0	57
TOTAL	0	89
%	0%	100%

In the temporal scope, we can distinguish between longitudinal temporal scope and transversal temporal scope. A temporal scope study is focused on a specific period, while a longitudinal temporal scope investigates throughout a period of years, decades or even centuries. In terms of geographical scope and temporal scope, we can see in a clear way that of the total of 89 articles, 100% are international articles and 100% are transversal, unable to post any national article and any longitudinal article.

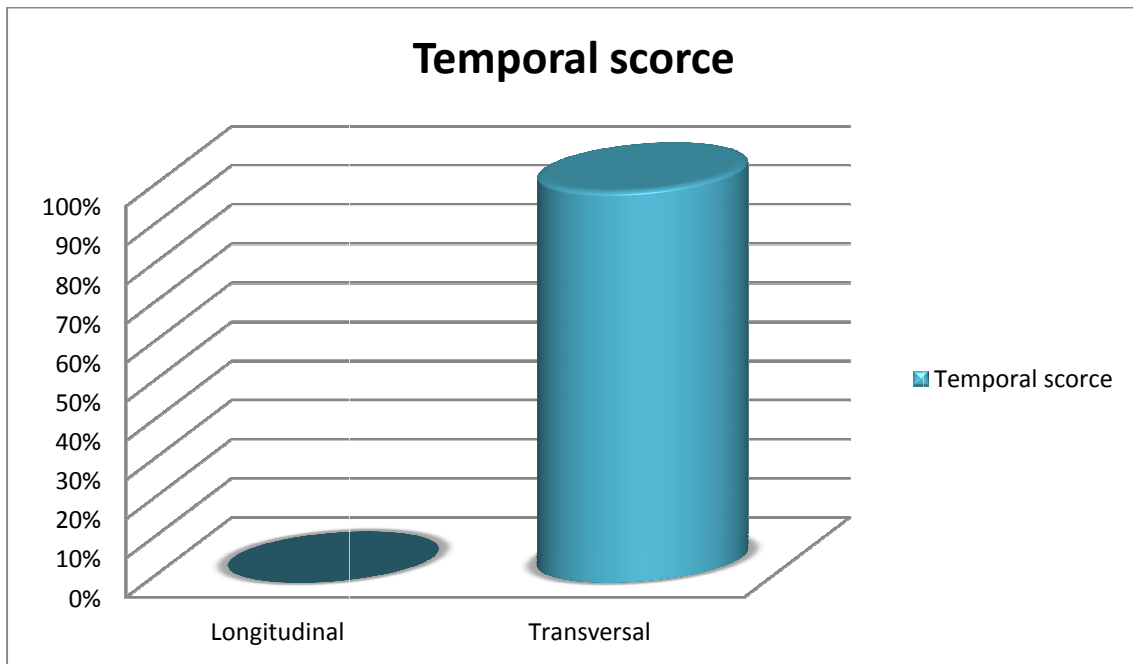


Figure 20. Percentage of works depending on the time sphere (longitudinal and transversal)

6. DISCUSSION AND CONCLUSIONS

The purpose of this work has been to provide an initial assessment of the state of research on the topics of Creativity and Innovation. To achieve this goal, we have focused on a number of journals (Academy of Management Journal, Academy of Management Perspectives, Academy of Management Review, Administrative Science Quarterly, Asia Pacific Business Review) and we have narrowed the study to a period of 5 years (2009-2013). After reviewing a database composed of 89 articles and performing an analysis of each of these articles, we can reach a number of conclusions that we can see below. To establish findings more clearly, we are going to make a distinction between certain paragraphs in the analysis, so we can achieve more accurate conclusions.

- Considerations about the scientific nature of the works.

Regarding the scientific nature of works in the period considered (2009-2013) and with the selected journals, we can see a majority of empirical studies against conceptual works. Also we can see how, as time goes by, there is an evolution and an increase of the number of articles, which are mostly empirical works leaving conceptual works behind. This allows us to conclude that the authors prefer to deal with the topics chosen, Creativity and Innovation, basing on experimentation to corroborate their hypotheses rather than to conduct a simple clarification of the meaning of the concepts.

- Considerations on the existence of research groups.

Once carried out the analysis, we can see that there is a superior trend to work in team than individually. That is to say, collective works predominate over individual ones. Still, it is noteworthy that in the formation of research groups, there is a predominance of groups of two or three people, leaving a very small group formation of a large number of members. Therefore, collective works, which are the most common, are usually composed by two or three people, and they are followed by individual works. With all this, we can come to a conclusion: although collective works predominate, researchers prefer to work in a small team made up by two or three members, since there are very few works written by many people.

- Considerations of the lines of research

In regard to the lines of research, as we have already done in the analysis, we distinguish two lines: by concepts discussed and by levels of analysis. To determine the conclusion we also proceed to make this distinction in order to obtain conclusions in a clearer way.

- By concepts discussed

To perform this analysis we distinguish between three lines of research: the Creativity line of research, the Innovation line of research and the Creativity and Innovation line of research. First, we have seen that there is a predominance of articles containing the word Innovation in the abstract against articles containing the word Creativity in the abstract which is a smaller number. Furthermore, we can see that as the time goes by there has been an increase in the number of articles written on Creativity and Innovation, always predominating the articles dealing with Innovation. But what has been the highlight of this research has been the small number of articles containing both words Creativity and Innovation in the abstract. Of the total of 89 articles, only two had the word Creativity and Innovation in the abstract, and emphasising that both articles belonged to the same journal (Asia Pacific Business Review) and to the same year (2011). It catches my attention that these two terms, Creativity and Innovation, are related in an important way but there are hardly any articles that relate both concepts.

On the other hand, if we focus on the journals analysed we can also get a number of important conclusions. In the first place, we stand out that in the journals Academy of Management Journal, Academy of Management Perspectives and Academy of Management Review, articles containing the word Creativity in the abstract predominate over articles containing the word Innovation in the abstract which are a less number. Also it catches my attention that in none of the journals, the journal Academy of Management Perspective and the journal Academy of Management Review, we can find no articles in which the word Innovation appears in the abstract within this selected period. The opposite happens with the journals Administrative Science Quarterly and Asia Pacific Business Review, in which it predominates the articles where the word Innovation appear in the abstract versus the articles that contain the word Creativity in the abstract. A noteworthy aspect is that in the journal Asia Pacific Business Review only four articles out of 55 contain the word Creativity in the abstract. Therefore, we can conclude that depending on the chosen journal there is a predominance of a particular line of research, highlighting again the small existence of articles whose abstracts have the words Creativity and Innovation together.

- By levels of analysis

To perform the analysis by levels of analysis we distinguish between three sections: Creativity, Innovation and Creativity and Innovation. Within each of the sections, we distinguish 5 levels of analysis: Individual, Team, Unit, Firm / Organization, and Environment. Of the analysed results we can obtain several conclusions.

First, regarding the word creativity we can observe that the largest percentage was 35.29%, and it corresponded to the Individual level of analysis. This one was followed by the Team level of analysis (26.47%) and the Environment level of analysis (26.47%). Therefore, the analysed articles often speak about creativity mainly as the creation of new useful ideas originated by a single individual. It means that most of the articles believe that creativity comes from an individual and this individual spreads it to the organization and the environment. Although in a lower percentage, creativity is also related to the creation of new and useful ideas that come from a team or from the environment. It means that creativity emerges through the interaction of a team, or from an environment. Therefore, we can see that creativity is mainly treated as two totally opposite things.

Secondly, in terms of Innovation, we can see in a clear way that most of the articles refer to Innovation as the introduction of a change or new proposals and inventions generated in an environment and that introduce innovations. That is to say that most of the articles establish that innovation occurs in an environment. The other levels of analysis represent a very low percentage compared to this. Therefore, we can conclude that to speak about Innovation it is used the term innovation related to the environment over other meanings.

Finally, to speak about the articles that contain the words Creativity and Innovation, we stand out that both of them use the Individual level of analysis and the Team level of analysis.

- Methodology and characteristics of the research

As we previously mentioned, there is a predominance of empirical studies against conceptual studies. Within the conceptual works, we can make a distinction between

purely conceptual works and descriptive conceptual works. This time, there are more purely conceptual works than descriptive conceptual works. As for the empirical works, there is also a distinction between qualitative empirical studies and quantitative empirical studies. In our analysis we have identified more quantitative empirical articles than qualitative empirical articles. Therefore, we can conclude that to speak of the chosen concepts, Creativity and Innovation, there is a tendency to use quantifiable data; that is to say, they tend to be able to prove the outlined issues in each article through data or evidence.

On the other hand, we can also get some conclusions on our analysis of the 30 quantitative empirical articles. It is highlighted in this analysis, the use of all the articles from the surveys to perform the research outlined by each article. In addition, it also stands out that most of the surveys have been carried out to the company employees. Therefore, we can deduce that people prefer to corroborate the theory with case studies.

With all this, we can establish that this research has provided an important contribution in regard to the dealt issues (Creativity and Innovation). We have seen several aspects. There is an unequal attention to the terms (Creativity and Innovation), so articles pay more attention to the issue of Innovation than to the issue of Creativity and we hardly ever find articles that contain the two terms at the same time in the abstract. It is a curious thing because of the relationship between the two terms. On the other hand, it is also highlighted the different meanings of the two terms that are in each article of the selected ones. With this we can conclude that the two analysed terms have a variety of definitions, so we can speak about different things using the same term. So when we speak about creativity or innovation, we can understand that they come from an individual or that they emerge in an environment.

7. LIMITATIONS AND FUTURE RESEARCH

Before concluding this analysis, I would like to determine a series of constraints, whose presence leads to possible future research lines.

Firstly, the dimension of the time into a period of five years (2009-2013) is an important limitation of time. This limitation to a specific period of time leaves out a large number of articles, whose analysis can contribute a lot to the investigation.

Secondly, the selection of five journals (Academy of Management Journal, Academy of Management Perspectives and Academy of Management Review, Administrative Science Quarterly and Asia Pacific Business Review) also limits our research. Although we had a reason to choose these journals setting aside many other journals also suppose an important limitation, since other journals may deal with the chosen issues.

Another important limitation in this analysis is the use of the abstract for the selection of articles. That is, in order to choose the articles we have used the abstract of each one of the articles: if the article contained one of the two words or the two of them, we chose the article. Therefore, this could have caused the discarding of certain articles which may speak of Innovation or Creativity, but did not contain any of the two terms in the abstract.

Therefore, and based on these limitations, future research can be bent on these three aspects. On the one hand, the period of time can be extended. On the other hand, we can increase the number of journals. And finally, we can do not rely just on the abstract to select articles, but maybe use the key words or other elements. This way, we could get a much deeper and more accurate research.

However, we can note that this study has no other goals than being used for a first research to go in depth into a more specific way in later investigations.

8. REFERENCES

- Academy of Management Journal (AMJ) (2014) [online] Available at: <http://aom.org/AMJ/> [Accesses 29 April 2014]
- Academy of Management Perspectives (AMP) (2014) [online] Available at: <http://aom.org/amp/> [Accesses 29 April 2014]
- Academy of Management Review (AMR) (2014) [online] Available at: <http://aom.org/AMR/> [Accesses 29 April 2014]
- Asia Pacific Business Review (APBR). (2014) [online] Available at: <http://www.researchgate.net/journal/1360-2381-Asia-Pacific-Business-Review> [Accesses 29 April 2014]
- Administrative Science Quarterly (ASQ). (2014) [online] Available at: <http://asq.sagepub.com/> [Accesses 29 April 2014]
- RAE, Real Academia Española (2014) Innovación [online] Available at: <http://lema.rae.es/drae/?val=innovar> [Accesses 29 April 2014]
- RAE, Real Academia Española (2014) Creatividad [online] Available at: <http://lema.rae.es/drae/?val=creatividad> [Accesses 29 April 2014]
- Vallet-Bellmunt, MT (2013-2014); Transparencies [PowerPoint] [Accesses 29 April 2014]
 - o Bigné, E. (1999): El análisis de contenidos, en Saravia, F.J. (coord): *Morfología en marketing y Dirección de empresas*, Ed. Pirámide, Madrid

- Kolbe, R.H. and Burnett, M.S.(1991): “Content analysis research: an examination of applications with directives for improving research reliability and objectivity”, Journal of Consumer Research, Vol. 18 (September): 243-250
- Vallet-Bellmunt, MT; Maretínez-Fernández, MT; Capó.Vicedo, J (2011) Supply chain management: A multidisciplinary content analysis of vertical relations between companies, 1997–2006, Industrial Marketing Management Forthcoming [Accesses 29 April 2014]
- Wikipedia. ISI Web of Knowledge [online] Available at: http://es.wikipedia.org/wiki/ISI_Web_of_Knowledge [Accesses 24 April 2014]
- Wikipedia, 2014. Creatividad [online] (2014) Available at: <http://es.wikipedia.org/wiki/Creatividad> [Accesses 24 April 2014]
- Wikipedia. Crisis económica [online] Available at: http://es.wikipedia.org/wiki/Crisis_econ%C3%B3mica_de_2008-2013 [Accesses 29 April 2014]
- Wikipedia. Innovación [online] Available at: <http://es.wikipedia.org/wiki/Innovaci%C3%B3n> [Accesses 24 April 2014]

9. APPENDIX: LIST OF PAPERS

Article 1. Yaping Gong, Tae-Yeol Kim, Deog-Ro Lee, and Jing Zh; (2012); A Multilevel Model of Team Goal Orientation, Information Exchange, and Creativity; Academy Management Journal.[e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 2. Markus Baer; (2012); Putting Creativity to Work: The Implementation of Creative Ideas in Organizations; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 3. Ronald Bledow, Kathrin Rosing, and Michael Frese; (2012); A Dynamic Perspective on Affect and Creativity; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 4. Katleen E. M. de Stobbeleir, Susan J. Ashford, and Dirk Buyens; (2011); Self-Regulation of Creativity at Work: The Role of Feedback-Seeking Behavior in Creative Performance; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 5. Roy Y. J. Chua; (2013); The Costs of Ambient Cultural Disharmony: Indirect Intercultural Conflicts in Social Environment Undermine Creativity; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 6. Shung J. Shin, Tae-Yeol Kim, Jeong-Yeon Lee, and Lin Bian; (2012); Cognitive Team Diversity and Individual Team Member Creativity: A Cross-Level Interaction; Academy Management Journal. [e-journal] Available through: Jaume I

University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 7. Giles Hirst, Daan Van Knippenberg, and Jing Zhou; (2009); A Cross-Level Perspective on Employee Creativity: Goal Orientation, Team Learning Behavior, and Individual Creativity; *Academy Management Journal*. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 8. Giles Hirst, Daan Van Knippenberg, Chin-hui Chen, and Claudia A. Sacramento; (2011); How Does Bureaucracy Impact Individual Creativity? A Cross-Level Investigation of Team Contextual Influences on Goal Orientation–Creativity Relationships; *Academy Management Journal*. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 9. Markus Baer, Roger Th. A. J. Leenders, Greg R. Oldham, and Abhijeet K. Vadera; (2010); Win or Lose the Battle for Creativity: The Power and Perils of Intergroup Competition; *Academy Management Journal*. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 10. Xiaomeng Zhang and Kathryn M. Bartol; (2010); Linking Empowering Leadership and Employee Creativity: The Influence of Psychological Empowerment, Intrinsic Motivation, and Creative Process Engagement; *Academy Management Journal*. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 11. Adam M. Grant and James W. Berry; (2011); The Necessity of Others is The Mother of Invention: Intrinsic and Prosocial Motivations, Perspective Taking, and Creativity; *Academy Management Journal*. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 12. Ella Miron-spektor, Miriam Erez, and Eitan Naveh; (2011); The Effect of Conformist and Attentive-To-Detail Members on Team Innovation: Reconciling the Innovation Paradox; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 13. Yaping Gong, Jia-Chi Huang, and Jiing-Lih Farh; (2009); Employee Learning Orientation, Transformational Leadership, and Employee Creativity: The Mediating Role of Employee Creative Self-Efficacy; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 14. Corey C. Phelps; (2010); A Longitudinal Study of the Influence of Alliance Network Structure and Composition on Firm Exploratory Innovation; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 15. Hui Liao, Dong Liu, and Raymond Loi; (2010); Looking at Both Sides of the Social Exchange Coin: A Social Cognitive Perspective on the Joint Effects of Relationship Quality and Differentiation on Creativity; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 16. Carmen Weigelt and MB Sarkar; (2009); Learning From Supply-Side Agents: The Impact Of Technology Solution Providers' Experiential Diversity On Clients' Innovation Adoption; Academy Management Journal[e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 17. Marco Tortoriello and David Krackhardt; (2010); Activating Cross-Boundary Knowledge: The Role of Simmelian Ties in the Generation of Innovations; Academy

Management Journal [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 18. Feirong Yuan and Richard W. Woodman; (2010); Innovative Behavior in the Workplace: The Role of Performance and Image Outcome Expectations; Feirong Yuan and Richard W. Woodman; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 19. Matthew S. Kraatz, Marc J. Ventresca, and Lina Deng; (2010); Precarious Values and Mundane Innovations: Enrollment Management in American Liberal Arts Colleges; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 3 de February 2014]

Article 20. Christina E. Shalley, Lucy L. Gilson, and Terry C. Blum; (2009); Interactive Effects of Growth Need Strength, Work Context, and Job Complexity On Self-Reported Creative Performance; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 6 February 2014]

Article 21. Reddi Kotha, Gerard George, and Kannan Srikanth; (2013), Bridging the Mutual Knowledge Gap: Coordination and the Commercialization of University Science; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 6 February 2014]

Article 22. Karen A. Jehn, Sonja Rispens, and Sherry M. B. Thatcher; (2010); The Effects of Conflict Asymmetry on Work Group and Individual Outcomes; Academy Management Journal. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 6 February 2014]

Article 23. Patrick G. Maggitti, Ken G. Smith, Paul E. Tesluk, and Riitta Katila; (2013); Top Management Attention to Innovation: The Role of Search Selection and Intensity in New Product Introductions; *Academy Management Journal*[e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 6 February 2014]

Article 24. Francisco Polidoro, Jr.; (2013); The Competitive Implications of Certifications: The Effects of Scientific and Regulatory Certifications on Entries into New Technical Fields; *Academy Management Journal*. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 6 February 2014]

Article 25. Hille C. Bruns; (2013); Working Alone Together: Coordination in Collaboration across Domains of Expertise; *Academy Management Journal*[e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 6 February 2014]

Article 26. Katleen E. M. de Stobbeleir, Susan J. Ashford, and Dirk Buyens; (2013); Self-Regulation of Creativity at Work: The Role of Feedback-Seeking Behavior in Creative Performance; *Academy of Management Perspectives*. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 7 February 2014]

Article 27. Adam M. Grant and James W. Berry; (2011); The Necessity of Others is The Mother of Invention: Intrinsic and Prosocial Motivations, Perspective Taking, and Creativity; *Academy of Management Perspectives*. . [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 7 February 2014]

Article 28. Jack A. Goncalo, Francis J. Flynn, and Sharon H. Kim; (2010); From a mirage to an oasis; narcissism, perceived creativity and creative performance; *Academy of Management Perspectives*. [e-journal] Available through: Jaume I

University Library website, database ISI Web of Knowledge [Accesses 7 February 2014]

Article 29. Giles Hirst, Daan Van Knippenberg, and Jing Zhou; (2009); A Cross-Level Perspective on Employee Creativity: Goal Orientation, Team Learning Behavior, and Individual Creativity; *Academy of Management Perspectives*. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 7 February 2014]

Article 30. Paul F. Skilton and Kevin J. Dooley; (2010); The Effects of Repeat Collaboration on Creative Abrasion; *Academy of Management Review*. [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 7 February 2014]

Article 31. Kjersten Bunker Whittington; Jason Owen-Smith; Walter W. Powell; (2009); Networks, Proximity and Innovation in Knowledge-intensive Industries; *Administrative Science Quarterly*. . [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 7 February 2014]

Article 32. Jason P. Davis, Kathleen M. Eisenhardt; (2011); Rotating Leadership and Collaborative Innovation: Recombination Processes in Symbiotic Relationships; *Administrative Science Quarterly*. . [e-journal] Available through: Jaume I University Library website, database ISI Web of Knowledge [Accesses 7 February 2014]

Article 33. Jung-Gun Kim and Su-Yol Lee; (2011); Effects of transformational and transactional leadership on employees' creative behaviour: mediating effects of work motivation and job satisfaction; *Asia Pacific Business Review*. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/19761597.2011.632590> [Accesses 12 February 2014]

Article 34. [David Grandadam](#), Patrick Cohendet and Laurent Simon ; (2013); Places, Spaces and the Dynamics of Creativity: The Video Game Industry in Montreal; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/00343404.2012.699191> [Accesses 12 February 2014]

Article 35. Vivien Lowndes and Sharon Squires; (2012); Cuts, collaboration and creativity; Asia Pacific Business Review. [[online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/09540962.2012.728779> [Accesses 12 February 2014]

Article 36. Violeta Keršulienė and Zenonas Turskis ; (2011); Integrated fuzzy multiple criteria decision making model for architect selection; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.3846/20294913.2011.635718> [Accesses 12 February 2014]

Article 37. Jordi Xifra and David McKie; (2011); Desolidifying Culture: Bauman, Liquid Theory, and Race Concerns in Public Relations; Asia Pacific Business Review[online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/1062726X.2011.605975> [Accesses 12 February 2014]

Article 38. Tesfamicheal Wossen, Thomas Berger, Teferi Mequaninte and Bamlaku Alamirew ; (2013); Social network effects on the adoption of sustainable natural resource management practices in Ethiopia; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/13504509.2013.856048> [Accesses 12 February 2014]

Article 39. Priyanka Parvathi and Hermann Waibel ; (2013); Fair Trade and Organic Agriculture in Developing Countries: A Review; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/08974438.2013.736043> [Accesses 12 February 2014]

Article 40. K. C. Surendra, Devin Takara, Jonas Jasinski and Samir Kumar Khanal; (2013); Household anaerobic digester for bioenergy production in developing countries: opportunities and challenges; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/09593330.2013.824012> [Accesses 12 February 2014]

Article 41. Douglas B. Richardson; (2013); Real-Time Space–Time Integration in GIScience and Geography; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/00045608.2013.792172> [Accesses 12 February 2014]

Article 42. Raghu Garud, Philipp Tuertscher and Andrew H. Van de Ven; (2013); [Perspectives on Innovation Processes](#); Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/19416520.2013.791066> [Accesses 12 February 2014]

Article 43. Uli Beisel, Ann H. Kelly & Noémi Tousignant; (2013); Knowing Insects: Hosts, Vectors and Companions of Science; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/09505431.2013.776367> [Accesses 12 February 2014]

Article 44. Michi Nishihara ; (2013); Optimal investment decision under regulatory and environmental risks; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/17509653.2013.783191> [Accesses 12 February 2014]

Article 45. Yuko Aoyama and Balaji Parthasarathy; (2013); Research and Development Facilities of Multinational Enterprises in India; Asia Pacific Business Review [online] Available at: <http://www.tandfonline.com/doi/pdf/10.2747/1539-7216.53.6.713> [Accesses 12 February 2014]

Article 46. Penelope B. Prime; (2013); Sustaining China's Economic Growth: New Leaders, New Directions?; Asia Pacific Business Review[online] Available at: <http://www.tandfonline.com/doi/pdf/10.2747/1539-7216.53.6.688> [Accesses 12 February 2014]

Article 47. Giulio Cainelli, Massimiliano Mazzanti and Sandro Sontresor; (2012); Environmental Innovations, Local Networks and Internationalization; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/13662716.2012.739782> [Accesses 12 February 2014]

Article 48. Corinne Autant-Bernard; (2012); Spatial Econometrics of Innovation: Recent Contributions and Research Perspectives; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/17421772.2012.722665> [Accesses 17 February 2014]

Article 49. James M. Cypher; (2013); Constructing Projects of National Development in Latin America?; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/07360932.2012.682315> [Accesses 17 February 2014]

Article 50. Ralph Hansmann, Harald A. Mieg and Peter Frischknecht; (2012); Principal sustainability components: empirical analysis of synergies between the three pillars of sustainability; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/13504509.2012.696220> [Accesses 17 February 2014]

Article 51. Sung Cheol Kim and Min Soo Shin; (2012); A new approach for overcoming innovator's dilemma: the catastrophe matrix of self-disruption; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/19761597.2012.681433> [Accesses 17 February 2014]

Article 52. Fred Steward ; (2012); Transformative innovation policy to meet the challenge of climate change: sociotechnical networks aligned with consumption and end-use as new transition arenas for a low-carbon society or green economy; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/09537325.2012.663959> [Accesses 17 February 2014]

Article 53. Camilla Adelle and Sabine Weiland ; (2012); Policy assessment: the state of the art; Asia Pacific Business Review. [en línea] Disponible en la dirección: <http://www.tandfonline.com/doi/pdf/10.1080/14615517.2012.663256> [Accesses 17 February 2014]

Article 54. Hans C. Komakech, Pieter Van der Zaag, Marloes L. Mul, Tulinumpoki A. Mwakalukwa and Jeltsje S. Kemerink; (2012); Formalization of water allocation systems and impacts on local practices in the Hingilili sub-catchment, Tanzania; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/15715124.2012.664774> [Accesses 17 February 2014]

Article 55. Ching-Chiao Yang; (2011); Assessing the moderating effect of innovation capability on the relationship between logistics service capability and firm performance for ocean freight forwarders; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/13675567.2012.669469> [Accesses 17 February 2014]

Article 56. Nabil Sultan and Sylvia van de Bunt-Kokhuis ; (2012); Organisational culture and cloud computing: coping with a disruptive innovation; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/09537325.2012.647644> [Accesses 17 February 2014]

Article 57. James H. Cowan Jr., Jake C. Rice, Carl J. Walters, Ray Hilborn, Timothy E. Essington, John W. Day Jr. and Kevin M. Boswell; (2012); Challenges for Implementing an Ecosystem Approach to Fisheries Management; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/19425120.2012.690825> [Accesses 17 February 2014]

Article 58. Pauline Kgomotso Gagoitseope and Jaloni Pansiri; (2012); Evaluation of Critical Success Factors for Developing Small and Medium-Sized Enterprises in Botswana; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/15228916.2012.657955> [Accesses 17 February 2014]

Article 59. Matts-Åke Belin, Per Tillgren and Evert Vedung ; (2012); Vision Zero – a road safety policy innovation; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/17457300.2011.635213> [Accesses 26 February 2014]

Article 60. Michael Gibbons, Camille Limoges and Peter Scott ; (2011); Revisiting Mode 2 at Noors Slott; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/08109028.2011.641384> [Accesses 26 February 2014]

Article 61. Susan E. Cozzens; (2013); End of empire: external and internal transitions in US policies for science, technology and innovation; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/08109028.2011.639564> [Accesses 26 February 2014]

Article 62. Alan Hughes; (2011); Open innovation, the Haldane principle and the new production of knowledge: science policy and university–industry links in the UK after the financial crisis; Asia Pacific Business Review. [online] Available at:

<http://www.tandfonline.com/doi/pdf/10.1080/08109028.2011.639565> [Accesses 26 February 2014]

Article 63. Seo Kyun Kim, Bong Gyou Lee, Beom Soo Park and Kyoung Seok Oh; (2011); The effect of R&D, technology commercialization capabilities and innovation performance; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.3846/20294913.2011.603481> [Accesses 26 February 2014]

Article 64. Anne Campbell and Jinjin Yang ; (2011); Leisure innovation among post-retirement women in north-eastern China; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/11745398.2011.639354> [Accesses 26 February 2014]

Article 65. Sawitree Sutthijakra; (2011); Dynamics of standards as an innovation process in service MNCs: a case of multinational hotel groups; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/19761597.2011.632591> [Accesses 26 February 2014]

Article 66. YoungJa Bae; (2011); Global value chains, industry structure, and technology upgrading of local firms: the personal computer industry in Korea and Taiwan during the 1980s; Asia Pacific Business Review[online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/19761597.2011.630597> [Accesses 26 February 2014]

Article 67. Hayoung Park, Kyung-Nam Kang and Hyaе Ryung Kim; (2011); Development of biotechnology clusters: the case of Daedeok Science Town, Korea; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/19761597.2011.632589> [Accesses 26 February 2014]

Article 68. Jung-Gun Kim and Su-Yol Lee ; (2011); Effects of transformational and transactional leadership on employees' creative behaviour: mediating effects of work motivation and job satisfaction; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/19761597.2011.632590> [Accesses 26 February 2014]

Article 69. Fu-Lai Tony Yu; (2011); Novelty and intersubjective communication: from denial to acceptance of Vincent Van Gogh's paintings; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/19761597.2011.630503> [Accesses 26 February 2014]

Article 70. Seongwuk Moon; (2011); What determines the openness of a firm to external knowledge? Evidence from the Korean service sector; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/19761597.2011.630502> [Accesses 26 February d2014]

Article 71. G.C. Aye and E.D. Mungatana; (2011); Technological innovation and efficiency in the Nigerian maize sector: Parametric stochastic and non-parametric distance function approaches; Asia Pacific Business Review [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/03031853.2011.617870> [Accesses 26 February 2014]

Article 72. Daniel Farhat; (2011); Virtually science: an agent-based model of the rise and fall of scientific research programs; Asia Pacific Business Review [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/1350178X.2011.628042> [Accesses 26 February 2014]

Article 73. Elissaios Papyrakis; (2011); Resource windfalls, innovation, and growth; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/17487870.2011.595570> [Accesses 26 February 2014]

Article 74. Hui Wang, Thomas Begley, Chun Hui and Cynthia Lee; (2012); Are the effects of conscientiousness on contextual and innovative performance context specific? Organizational culture as a moderator; Asia Pacific Business Review[online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/09585192.2011.561246> [Accesses 26 February 2014]

Article 75. Sofia Börjesson ; (2011); Collaborative research for sustainable learning: the case of developing innovation capabilities at Volvo Cars; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/14767333.2011.603407> [Accesses 26 February 2014]

Article 76. Mikko Valorinta, Henri Schildt and Juha-Antti Lamberg;(2011); Path Dependence of Power Relations, Path-Breaking Change and Technological Adaptation; Asia Pacific Business Review. [[online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/13662716.2011.621745> [[Accesses 26 February d2014]

Article 77. Marcus Wagner and Patrick Llerena; (2011); Eco-Innovation Through Integration, Regulation and Cooperation: Comparative Insights from Case Studies in Three Manufacturing Sectors; Asia Pacific Business Review[online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/13662716.2011.621744> [Accesses 26 February 2014]

Article 78. Xiaolan Fu and Jing Zhang; (2011); Technology transfer, indigenous innovation and leapfrogging in green technology: the solar-PV industry in China and India; Asia Pacific Business Review. [online] Available at:

<http://www.tandfonline.com/doi/pdf/10.1080/14765284.2011.618590> [Accesses 26 February 2014]

Article 79. Tim Loughran and Sophie Shive; (2011); The Impact of Venture Capital Investments on Public Firm Stock Performance; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/15427560.2011.620723> [Accesses 10 March 2014]

Article 80. Ritsuko Ozaki and Mark Dodgson; (2010); Adopting and consuming innovations; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/08109028.2010.537170> [Accesses 10 March 2014]

Article 81. Fulvio Castellacci; (2011); How does competition affect the relationship between innovation and productivity? Estimation of a CDM model for Norway; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/10438599.2010.516535> [Accesses 10 March 2014]

Article 82. Elvira Vieira, Isabel Neira and Emília Vázquez; (2011); Productivity and Innovation economy: comparative analysis of European Nuts II, 1995–2004; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/00343404.2010.486781> [Accesses 10 March 2014]

Article 83. Patrik Gustavsson Tingvall and Patrik Karpaty; (2010); Service-sector competition, innovation and R&D; Asia Pacific Business Review [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/10438590903073675> [Accesses 10 March 2014]

Article 84. Shu-Hsien Liao, Wen-Jung Chang and Chi-Chuan Wu; (2010); Exploring TQM-Innovation relationship in continuing education: A system architecture and propositions; Asia Pacific Business Review. [online] Available at:

<http://www.tandfonline.com/doi/pdf/10.1080/14783363.2010.529330> [Accesses 10 March 2014]

Article 85. Lars Fredrik Andersson, Liselotte Eriksson and Magnus Lindmark ; (2010); Life insurance and income growth: the case of Sweden 1830–1950; Asia Pacific Business Review. [online] Available at: [Accesses 10 March 2014]

Article 86. Grace Tyng-Ruu Lin, Yo-Hsing Chang and Yung-Chi Shen; (2010); Innovation policy analysis and learning: Comparing Ireland and Taiwan; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/08985626.2010.483290> [Accesses 10 March 2014]

Article 87. Giovanni Bonifati; (2010); More is different', exaptation and uncertainty: three foundational concepts for a complexity theory of innovation; Asia Pacific Business Review. [en línea] Disponible en la dirección: <http://www.tandfonline.com/doi/pdf/10.1080/10438599.2010.511455> [Accesses 10 March 2014]

Article 88. Analía Erbes, Verónica Robert and Gabriel Yoguel; (2010); Capacities, innovation and feedbacks in production networks in Argentina; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/10438590903040807> [Accesses 10 March 2014]

Article 89. Netra B. Chhetri and William E. Easterling; (2010); Adapting to Climate Change: Retrospective Analysis of Climate Technology Interaction in the Rice-Based Farming System of Nepal; Asia Pacific Business Review. [online] Available at: <http://www.tandfonline.com/doi/pdf/10.1080/00045608.2010.518035> [Accesses 10 March 2014]