

Bibliometric Study of Specific Human Capital

—Based on the CNKI Series Data Analysis from 2000 to 2014

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Abstract. By retrieving and statistics from 2000 to 2014 in CNKI published journal articles on the specific human capital of the documents, summarizing and refining the basic characteristics of the current domestic academic research and the dynamic of the frontier. Application of relevant statistical analysis, the author found that the specific human capital became the research focus, and its internal "ripped off" problem became a heated research topic recently. Nevertheless, the specific human capital research perspective is relatively single and the empirical study and comparative study are weak. So In the future, we require interdisciplinary study and strengthen the comparative study and empirical study.

Introduction

Study on human capital since the last century since 80s, gradually become a hot research topic in the academic circle of our country, the research on the breadth and depth of continuous extension. The "human capital" in the title was only 1 retrieval since 1980 to August 3, 2014 found 12276 results in CNKI journals database, and to "human capital" as the key words in the CNKI journal the databases were searched from 1979 2 to August 3, 2014 to find information about 25929 results, explaining the visible human capital on related issues about the research become the continuation of life.[1] But specific the research of human capital has made it possible to understand and grasp the research direction of the research field of specific human capital in China at the beginning of this century.

Data Sources and Research Methods

Sample Retrieval Sources. On the topic of "the specificity human capital" was only 1 retrieval since 2001 to August 9, 2014 found 72 results in CNKI journals database, and to "specific human capital" as keywords in CNKI journal database retrieval from 1979 2 to August 9, 2014 67 to find information about the final results, after screening 94 the paper has become the basic research. Then according to the "human capital specificity", "special human capital" as the title or keyword matching search, after the final screening of selected sample of 145 articles as this Basis of analysis.[1]

Research Methods. The method of literature measurement is adopted, from "published distribution", "distribution of authors", "keyword distribution", "distribution dispatch units", "hierarchical distribution", "distribution of subjects" and "distribution of citations" perspective, describe and analyze the sample document, draw relevant conclusions.

The Basic Situation and Quantitative Description Analysis

Distribution in the Years of Publication. In 2001 to 2014 14 years, included in the CNKI Journal of research on human capital paper can almost be said to be an immense number of books, but the number of the specific human capital is not much, the selected sample of 145 papers collected from the number of achievements of the year with the distribution as shown in table 1.

Table 1 Literature distribution of special human capital research from 2000 to 2014

year	number of parts	percentage	year	number of parts	percentage
2000	1	0.69%	2008	15	10.35%
2001	2	1.38%	2009	12	8.28%
2002	1	0.69%	2010	21	14.48%
2003	2	1.38%	2011	19	13.10%
2004	10	6.90%	2012	15	10.35%
2005	12	8.28%	2013	5	3.45%
2006	12	8.28%	2014	5	3.45%
2007	13	8.97%			

Source: <http://www.epub.cnki.net> (In Chinese).

From the table 1 shows that in 2000 domestic related research result is only 1, accounted for 0.69%. Of the total sample after three years of research on specific human capital scarcity, until 2004 was a breakthrough of research results the annual average of 9.7 to 10, until 2012, 9 consecutive years of relevant achievements has been 10-21 however, since 2013, the research in this field gradually cooling, due to the statistical time at the end of August 9, 2014, 2014 results only 5 articles, estimated in 2013 continued the cooling trend, the annual research will not rebound. As far as the research on quantity distribution is concerned, the domestic scholars pay little attention to the study of specific human capital

Keywords Distribution. Keywords concentration can reflect the research situation in this field and the overall features of the development, contribute to the development trend of the scientific forecast. Through the statistics of the sample documents of this study, a total of 336 at the end of the relevant keywords, in order to improve the accuracy of the research, the following selection of popular keywords ranked 20 before the analysis. As can be seen from table 2, in the first 20 words of the highest frequency, the "special human capital" is a term used most, reached 63 times, accounting for 11.19% of the total frequency of the use of keywords, accounting for 43.45% of the total number of samples; if its existence and direct the "human capital", "enterprise specific human capital", "exclusive human capital" and other words, the total number of index is up to 106 times, accounting for 31.55% of the total number of keywords, accounting for 73.10% of the total number of samples and samples; visible references, strong and specific human capital agglomeration the heat is high. And the "special investment" keywords appear 13 times, ranked fourth, and directly related to the search such as "firm specific human capital investment" and "investment" keyword statistics appear 32 times, therefore the study of specific human capital results more relates to human capital Study on the investment returns. And the "ripped-off" problem in the specific human capital accumulation process is one of the employers can not avoid the problem, so the key word in the entire study keywords also squeezes into the top ten, the academic circles pays more attention to. And the 20 previous words can also be seen on special human capital more from "corporate governance (3) to analyze the" point of view, the academic research focused more on the enterprise specific human capital, according to the specific human capital investment incentives, "ripped-off" problem seek solutions, put forward the corresponding theoretical support. "The enterprise specific human capital this investment ","ripped-off ","incentive ","internal labor market ","long-term employment ","incomplete contract ","corporate governance "and other words can be sketched out for nearly more than 10 years, the basic context of specific human capital research.

Table 2 Key words distribution of specialized human capital research from 2000 to 2014

order number	keyword	number of parts	percentage	order number	keyword	number of parts	percentage
1	specific human capital	63	11.19%	11	tenure	4	0.71%
2	specificity of manpower capital	26	4.62%	12	internal labor market	4	0.71%
3	human capital	25	4.44%	13	ingress	4	0.71%
4	specific investment	13	2.31%	14	long-term employment	4	0.71%
5	specific human capital	8	1.42%	15	"Ripped-off"	3	0.53%
6	specificity	6	1.07%	16	Three premium	3	0.53%
7	Enterprise specific human capital	6	1.07%	17	incomplete contract	3	0.53%
8	Specific human capital investment	5	0.89%	18	transaction cost	3	0.53%
9	Ripped off	5	0.89%	19	corporate governance	3	0.53%
10	encourage	5	0.89%	20	organization of information	3	0.53%

Source: <http://www.epub.cnki.net> (In Chinese).

Subject Category Distribution. Research of human capital as the 1980 ' s hot and difficult problem in the field of economic management in our country, and the specificity of human capital research focuses in the field of enterprise specificity of human capital, so the subject areas are mainly concentrated in the study of enterprise economic segment. According to the statistical analysis of the sample, the distribution of the main disciplines of human capital research in China is shown in table 3.

Table 3 Publication of special human capital research papers in 2001-2014 years

branch of learning	education	Economics and management science	politics	law	history	sociology	mathematics	amount to
number of parts	11	123	4	1	1	0	5	145

Source: <http://www.epub.cnki.net> (In Chinese).

Can be seen from table 3, the essence of the research on specific human capital in various disciplines, but the study belongs to the subject of economic and management from the perspective of the most prominent, the relevant research results reached 123, accounted for 84.83% of the total sample documents, which conform to the essence of the problem of specific human capital. But it also shows that and most of the research is mainly confined to the field of research. From the perspective of education ranked second, but its research output is only 11, accounted for only 7.59%. Of mathematical research from the perspective of the total sample ranked third, the result is 5. In addition, other disciplines such as law, history School occupies a volume below 0.69%, indicating that these subjects relatively low participation, social science in perspective is almost 0. The fact

that the research results form can be attributed to other disciplines, but still essentially can be classified as economic subjects or disciplines of management. From the above brief analysis, the concept of specific inference can the essence of human capital, and the theory is not caused the attention of society, but also reflects the high degree of professional research in this field, resulting in the automatic exclusion effect on other subjects.

Research papers cited reflects the academia pay close attention to the field of representative achievements, is an important index to reflect the research results of the academic value and academic influence. Research results of the cited frequency are high, the one hand means that the academic level is generally accepted by the industry, but also from the side of the field the attention of academic circles. 1 the following summarizes my Ancient Chinese Literature Search community specific human capital research sample literature citations top 10 papers statistics are given in table 4.

From the contents of cited papers, academic influence I Ancient Chinese Literature Search research on specific human capital mainly concentrated in two aspects. One is to attach importance to the research on enterprise specific human capital investment management performance. The research of this aspect from the origin research belongs to the study of specific human capital, in human capital operation today, the core competitiveness of enterprise competition is no longer the material capital and transfer to the human capital, and human capital competition in the most competitive is the enterprise specific human capital. The key competitiveness of enterprises as the survival, the need for related theoretical problems to be clarified, such as special human the connotation and extension of the capital, specific human capital investment, these problems are the fundamental problems in the academic research first to find out. [2] The two is from the special research perspective of human capital theory of human capital. The employment problem is not only one of the theoretical basis of economics of education, but also the labor theory of classical studies in economics, the domestic scholars closely combined with the specific situation and the development of education practice of our country, try to specific human capital from the perspective of college students and other related people to find and solve the employment problem.[3]

Table 4 Publication of the top 10 papers on the study of specific human capital in the past 2000-2014 years

order number	autograph	author	source	Publication Frequency	citation
1	High involvement work system and firm performance: the effect of specific human capital and environmental dynamism	Cheng Dejun; Zhao Shuming	Management World	2006/03	149
2	Research on special human capital investment incentive	Luo Pinliang, Si Chunlin	Journal of Management	2001/02	90
3	Enterprise information structure, the specificity of human capital and the choice of human resource management model	Cheng Dejun; Zhao Shuming ; Tang Yi	China Industrial Economy	2004/01	89
4	The influence of the generality and exclusiveness of human capital on the employment of College Students	Tian Yongpo	Journal of Beijing normal university (social science edition)	2004/03	46
5	Research on College Students' employment behavior: from the perspective of specific human capital	Meng Dahu	JYFZ	2005/15	36
6	Specific human capital, labor transfer and regional economic development	Lai Desheng ; Meng dahu	Chinese Journal of Population Science	2006/01	31
7	Research on human capital and entrepreneur stock ownership	Zhang Rende	Nankai Journal	2000/04	24
8	The free policy of normal school students from the perspective of human capital accumulation	Zhang Hui	China Higher Education Research	2007/10	22
9	Segmented gains, specific human capital and employment of College Students	Meng Dahu, Feng Jiming	academic forum	2004/04	20
10	The influence of professional choice on the quality of College Students' Employment	Meng Dahu	Modern university education	2004/05	20

Source: <http://www.epub.cnki.net> (In Chinese).

Author Distribution. Each subject will have a number of influential mainstream scholars whose focuses and research results often represent the frontier of the discipline. Since the sample literature began in 2000, and the total number was only 145, so accurate statistics involving 227 authors, so accurate statistics relating to the author, 227 people, so the results of the study are only 0.64 articles, specificity of human capital research strength is fragmented, visible only from the simple data analysis of the team to estimate the domestic system has not been formed, studies in this field is still in a scattered accumulation period. The author selected scattered author statistics ranked in the top ten of the following table 5, visible, even the top ten the author is not high and the lack of continuity

of the author itself, in the research field of specific human capital is not the mainstream scholars. Number one scholar You Lin has 9 papers in the field, the annual concentration of -2012 in 2009, 2012 reached a peak of published 4, after nearly 20132014 two years of relevant research results. The scholar Meng Dahu ranked second in 5 papers in the field, the results are only concentrated in 2005 and 2006. After ranking third scholar Hu Haozhi, the research began in 2010, 2014 years no published specific human capital related results publicly. It is worth mentioning that the research results of Meng Dahu and special human capital in the vast majority of different perspectives, the study is the empirical research of specific human capital from the perspective of the employment of college students. But most domestic scholars from the perspective of management science the specific human capital investment, the theory of incentive and governance, experience or empirical research.

Table 5 the research results of specific human capital were ranked among the top 10
From 2000 to 2014

order number	author	number of parts	percentage	order number	author	number of parts	percentage
1	Lin you	9	6.21%	6	LI Xiaoxia	3	2.07%
2	Meng Dahu	5	3.45%	7	Zhao Shuming	3	2.07%
3	Hu Haozhi	5	3.45%	8	Yuyibing	2	1.38%
4	Wu Aihua	3	2.07%	9	Lu Xianxiang	2	1.38%
5	Zuo Shuangxi	3	2.07%	10	Wu Ying	2	1.38%

Source: <http://www.epub.cnki.net> (In Chinese).

Institutional Distribution of The Authors. From the authors of the paper composition table 6, therefore, the research of the specific human capital mainly concentrated in universities, Naval University of Engineering ranked first, but also only have a scholar's main achievements, visible results ranked in the top ten of the rest of the study in general about 5 articles, and research efforts in this field are scattered. The relative strength of the Nanjing University research is more concentrated.

Table 6 Research on specific human capital from 2000 to 2014, the author's top 10 distribution

order number	Author affiliation	number of parts	percentage	order number	Author affiliation	number of parts	percentage
1	NUEPLA	9	6.21%	6	Xi'an Jiaotong University (XJTU)	5	3.45%
2	Nanjing university	8	5.52%	7	Hubei University	5	3.45%
3	Beijing Normal University	7	4.83%	8	Lu dong University	5	3.45%
4	Zhongnan University of Economics and Law	5	3.45%	9	Renmin University of China	4	2.76%
5	Dongbei University of Finance and Economics	5	3.45%	10	Xiamen University	4	2.76%

Source: <http://www.epub.cnki.net> (In Chinese).

Periodical Distribution of Papers Published. The Journal of mass distribution can represent a certain period. Through the research results statistics sample document the number of papers published in academic journals such as the top ten are shown in Table 7. The total amount of statistics in the published results, CSSCI < > research productivity source journals published 4 articles in other journals, and tied for first place. Table 7 can be seen in the top ten journals of a total of 29 papers, including 5 journals from CSSCI papers with a total of 17 articles, the special human capital research published showed agglomeration function in high quality journals. In addition, in order to further confirm this conclusion, to the 2000-2014 years to reach 53 in the number of published CSSCI source papers, accounting for 36.60% of the total sample, therefore, specific human capital research results although the overall number of less than normal, but the quality of research is still relatively high. Journal of the top ten source of CSSCI the number of papers (Table 8), can be seen from table 8. Ranked first in the journal *Productivity Research* of nearly ten years a total of 4 articles published in other journals, such as *Business Economics and Administration*, *Science and Technology Management Research* and *Science Studies* are only published 3 articles on the compound second, *Human resources development in China* and *Journal of Beijing Normal University (SOCIAL SCIENCE EDITION)* are only published 2 articles on the compound third, other research results were found in 36 journals from CSSCI, that 2000-2014 research of specific human capital distribution of periodicals as a whole a dispersed trend, the research results show that the bearing journals are widely used.

Table 7 2000-2014 the number of papers published, the top ten academic journals distribution

order number	journal	number of parts	percentage	order number	journal	number of parts	percentage
1	Military economic research	4	2.76%	6	Science and Technology Management Research	3	2.07%
2	Productivity Research	4	2.76%	7	vocational and technical education	3	2.07%
3	Business Economics and Administration	3	2.07%	8	Human resources development in China	2	1.38%
4	Technical economy and management research	3	2.07%	9	journal of Beijing normal university (SOCIAL SCIENCE EDITION)	2	1.38%
5	Science Studies	3	2.07%	10	Journal of shiyuan technical institute	2	1.38%

Source: <http://www.epub.cnki.net> (In Chinese)

Table 8 2000-2014 publication volume, top ten CSSCI source journal distribution

order number	journal	number of parts	percentage	order number	journal	number of parts	percentage
1	Productivity Research	4	2.76%	6	Journal of Beijing Normal University (SOCIAL SCIENCE)	2	1.38%
2	Business Economics and Administration	3	2.07%	7	Science, economy and society	1	0.69%
3	Science and Technology Management Research	3	2.07%	8	soft science	1	0.69%
4	Science Studies	3	2.07%	9	economic review	1	0.69%
5	Human resources development in China	2	1.38%	10	social scientist	1	0.69%

Source: <http://www.epub.cnki.net> (In Chinese).

Conclusions and Recommendations

Analysis of Current Research Situation. In 2000 to August 9 2014 during the day, the domestic academic circles are more extensive exploration and Research on specific human capital, nearly 15 years has made some theoretical research results, persistent study of specific human capital contribution, but also for the current enterprise management, to provide a theoretical support and practice according to the development of economy. But the research results are still problems need to be solved.

First, analysis of the specific human capital perspective is single. 2000-2014 research results, the research results of above 80% only from the management perspective of the discipline theory and experience, the essence of the research results can even research 100% as economic management disciplines. This is decided by the essence of specific human capital issues the specific human capital. However, the problem should be widely exists between firms and individuals, requires broad participation of other disciplines. The author thinks that the specific human capital problem is only narrow research in the field of management, to education, law However, it is a pity that there is relatively little literature about the specific human capital in other disciplines

Second, the research content focused on enterprise specific human capital. The specific human capital has been a focus of research on corporate governance, there is a close relationship between the origin, keen to study enterprise specific human capital and specific human capital research but is for the segmentation of firm specific human capital shortage. For non enterprise specific human capital and other forms of the results are also very rare.

Third, to deepen the research level. From the previous literature review analysis, research contents focus more on the theoretical and empirical studies of specific human capital, empirical research and comparative research results. The relatively small number of statistical sample literature, comparative research in the strict sense is almost 0, empirical research results only 11, only about 7% of the visible results by empirical research. In addition the microscopic study of specific human capital is concentrated, macro research is less.

Fourth, research is weak and scattered. From the author, author and research journal distribution can be seen on the whole research on the trend of weakening in recent 15 years directly related research results only hundreds of papers, authors and scattered distribution, obviously it has not formed a strong research team, for the final performance of coagulation is the lack of overall study.

Research Prospect

First, strengthen the research of multidisciplinary view. The specific human capital is not only a problem, the enterprise internal management involves social, political, economic, legal, education and other disciplines, but also can be said of the specific human capital should be a multidisciplinary problem, multidisciplinary, systematic research of the specific human capital to solve the problem of specific human capital investment management, issues related to opportunism.

Second, broaden the specific human capital research. Specific human capital not only exists in the field of enterprise management, only the issue of enterprise specific human capital from the perspective of enterprise micro level, is not sufficient to explain other industry specific human capital issues need to solve social reality, so the need for industry specific human capital, occupation specific human capital, expand the research area of specific human capital and professional specific human capital and other fields.

Third, to strengthen the comparative analysis and empirical analysis of specific human capital. The specific human capital in today's world is a common problem, comparative analysis helps to find out the law to find commonalities, thereby effectively referring to the development of research at home and abroad, can avoid the research and practice of detours, effectively saving human capital an empirical study on investment. Researchers can avoid empty talk, talk, help researchers in-depth practice, according to the practice requirements put forward effective argumentation.

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