

Statistics and Analysis of Highly Cited Papers in Core Journals of China's Publishing Industry

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Abstract—Using the citation query function of China Citation Database, this paper makes statistics on the highly cited papers of China's publishing core journals from 2007 to 2016. According to the publishing situation, six journals such as China Science and technology journal research and editorial journal are selected as important journals for China's publishing research; Beijing, Shanghai and Henan are the concentrated output places of highly cited papers in China's publishing industry; The Journal of Chinese Medical Association, Chinese Academy of Agricultural Sciences, Renmin University of China, Henan science and technology journal research center, Chinese Academy of Sciences and Wuhan University are important institutions for publishing research in China; Cheng Weihong, Liu Xueli, Peng LAN, yuan Guiqing and you Suning are prolific authors of highly cited papers in the publishing industry; The research topics of highly cited papers mainly focus on journal editing and publishing, communication theory, publishing automation and information analysis and research. The purpose of this study is to enhance the understanding and grasp of the research status of China's publishing industry, and to provide reference for the review and organization of publishing journals.

Index Terms—Publishing industry, recognized kernel journals, Highly cited papers, times cited.

I. INTRODUCTION

Highly cited papers refer to academic papers with relatively high cited frequency and long citation cycle [1], which has important guiding significance for selecting topics, soliciting contributions and grasping the law of development for journals [2]. We conducted a statistical analysis on the highly cited papers which were published in 11 core journals of publishing industry [3] (except for the review journal Reading) from 2007 to 2016 in 2017 edition, in order to understand the journals, authors, institutions and themes of these papers.

II. RESEARCH METHODS

We got access to China Citation Database on 10 August 2021. The papers which were published earlier are more likely to obtain higher citation times [4]. Therefore, in this study, the top 20 papers with the most cited times in each journal are defined as highly cited papers, and those with the same citation frequency are included. We retrieved 205

highly cited papers in total for the past decade, and EXCEL2007 was used to analyze these papers.

III. STATISTICAL RESULTS AND ANALYSIS

A. Distribution of Highly Cited Papers

205 highly cited papers are from 11 core journals of publishing industry (see Table 1). More than 15 highly cited papers have been published in 6 journals, including China Science and technology journal research, editorial journal, publication and distribution research, friends of editors, China Publishing and science and technology and publishing, and 193 papers have been published in 10 years, indicating that these 6 journals have become important journals for the research of publishing industry in China.

TABLE 1 NUMBER AND TOTAL CITED FREQUENCY OF HIGHLY CITED PAPERS PUBLISHED IN CORE JOURNALS OF PUBLISHING INDUSTRY FROM 2007 TO 2016

Title	Number of articles	Total cited frequency	Mean value of cited frequency
Research on Chinese Sci tech Journals	56	Publishing Science	3
Editorial Journal	50	Modern publishing	3
Research on publishing and distribution	30	Chinese Editor	3
Friends of Editors	22	Editors Monthly	2
China Publishing	20	Publishing wide angle	1
Technology and publishing	15		

B. Time Distribution of Highly Cited Papers

Table 2 shows that among the 205 papers, the Journal of editors produces highly cited papers every year, while the research on China Science and technology journals, research on publishing and distribution, friends of editors, China Publishing and science and publication also produce highly cited papers almost every year except a few years, indicating that the papers published by these journals have high academic influence, In a long period of time, it is the focus of attention and research.



TABLE 2 CHRONOLOGICAL DISTRIBUTION OF HIGHLY CITED PAPERS
 PUBLISHED FROM 2007 TO 2016 (ARTICLES)

Journal name	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Research on Chinese Sci Tech Journals	0	6	3	6	9	11	2	8	6	5
Editorial Journal	13	9	6	6	4	2	1	3	4	2
Research on Publishing and Distribution	2	5	5	4	1	3	7	0	2	1
Friends of Editors	2	0	0	1	0	2	6	2	4	5
China Publishing Technology and Publishing	1	0	2	3	3	1	2	1	3	4
Science Publishing	1	0	2	0	2	1	1	6	0	2
Modern Publishing	0	0	2	1	0	0	0	0	0	0
Chinese Editor	1	0	0	0	1	0	1	0	0	0
Editors Monthly	1	0	1	0	0	0	0	0	1	0
Publishing Vide Angle	0	0	0	0	1	0	0	0	1	0
Total	0	0	0	0	0	0	0	0	0	1
	21	20	21	21	21	20	20	20	21	20

C. Statistics of The Top 30 Highly Cited Papers

In order to understand the research connotation of highly cited papers, table 3 makes statistics on the top 30 of 205 highly cited papers. The results show that the total cited frequency of 30 papers is 3399, accounting for 28.4% of the total cited frequency of 11959. Among the top 30 papers cited, 9 were "Research on Chinese Sci tech Journals", 7 were "Friends of Editors" and 5 were "Journal of Editors". These three journals were selected in the largest number, accounting for 70% of the total. The single paper with the highest citation frequency was Peng Lan's article "era of big data: new shocks facing the journalism" published in the first issue of "Friends of Editors" in 2013, It was cited 319 times (see Table 3).

TABLE 3 STATISTICS OF THE 30 MOST FREQUENTLY CITED PAPERS FROM 2007 TO 2016 (BASED ON THE STATISTICS OF THE FIRST AUTHOR)

Author	Thesis title	Source journal	Publication time	Times cited
Lan Peng	"Big data" era: new shocks facing the news industry	Friends of Editors	2013 (01)	319
Wenliang Xie	Innovation of WeChat official account service mode in academic journals in the mobile Internet Era	Research on Chinese Sci Tech Journals	2015 (01)	232

WeiHong Cheng	Countermeasures and suggestions on the transformation of China's scientific and technological journals from traditional publishing to digital publishing	Research on Chinese Sci Tech Journals	2011 (07)	151
Yan Zhang	Instant marketing model and strategic realization from the perspective of communication -- Taking wechat marketing as an example	China Publishing	2013 (08)	150
Bin Wang	Big data and news concept innovation -- Taking the first global "data news award" as an example	Friends of Editors	2013 (06)	139
Weidong Han	Mining highly cited papers is conducive to improving the academic influence of scientific and technological journals	Research on Chinese Sci Tech Journals	2010 (07)	131
Ladi Hao	Application of orthogonal test result analysis method in scientific papers	Editorial Journal	2007 (10)	124
Haiyan Wang	Analysis of editing and operation strategy of WeChat official account in traditional media	Friends of Editors	2015 (02)	119
Rui Xu	Data news: the core competitiveness of news production in the era of big data	Friends of Editors	2013 (12)	112
Zhenning Nie	Digital publishing: there is still a long way to go from maturity	Publishing Science	2009 (01)	108
WeiHong Cheng	Current situation of open access publishing of Chinese Sci-tech Journals	Editorial Journal	2007 (06)	104
Yiwen Yu	Research on the construction of academic journal exchange platform based on wechat platform	Research on Chinese Sci Tech Journals	2014 (05)	102
Xiaoke Guo	Development status and function of data	Friends of Editors	2013 (08)	100



Yanping Zhang	Journalism Quantitative analysis based on four core Sci-tech Journals	Research on Chinese Sci Tech Journals	2015 (05)	100
Yong Ma	Analysis on function selection of wechat public platform by academic journals	Technology and Publishing	2014 (09)	97
Rui Liu	Current situation, problems and Countermeasures of government microblog operation in China	Friends of Editors	2012 (07)	96
Canjiao Liu	On the integration of digital publishing industry chain	China Publishing	2009 (01)	94
Suning You	Reflections on the internationalization of scientific and Technological Journals	Editorial Journal	2008 (02)	93
Xianglian Deng	Characteristics of information dissemination in new media environment	Editors Monthly	2011 (04)	92
Jing Shi	On the influence evaluation of microblog and wechat platform in scientific and Technological Journals	Research on Chinese Sci Tech Journals	2014 (05)	92
Xinhong Wang	Giving priority to digital publishing is a new mode to improve the publishing speed of academic journals	Research on Chinese Sci Tech Journals	2011 (01)	87
Weihong Cheng	Current situation of website construction of Chinese science and technology core journals	Research on Chinese Sci Tech Journals	2011 (07)	87
Jingji Wu	Research on wechat marketing in publishing industry	China Publishing	2013 (04)	87
Suning You	Internal and external worries of Chinese sci-tech periodicals	Editorial Journal	2011 (06)	86
Xiaoming Zhang	Public cultural service: Exploration of theoretical and practical implications	Research on Publishing and Distribution	2008 (03)	85
Lan Peng	The feature, development and editing principle	Chinese Editor	2007 (07)	83

of network news topic	Investigation and Analysis on the current situation of scientific and technological Journals in Colleges and Universities in China	2008 (02)	83
Yuan Yao	Editorial Journal		

D. Regional Distribution of Highly Cited Papers

Table 4 shows that 205 highly cited papers come from 25 provinces, cities and autonomous regions in China, including 78 in Beijing, 14 in Shanghai, 12 in Henan, 11 in Hubei, Jiangsu and Guangdong, 9 in Zhejiang and Hunan, and 8 in Fujian, Shaanxi and Liaoning. A total of 179 highly cited papers have been published in these regions, indicating that the research development of publishing industry in China is uneven, The high-level achievements mainly come from a few areas with relatively developed economy and culture.

TABLE 4 REGIONAL DISTRIBUTION OF HIGH CITED PAPERS

Issuing agency	Number of papers / piece
Beijing	78
Shanghai	14
Henan	12
Hubei	11
Jiangsu	11
Guangdong	11
Zhejiang	9
Hunan	9
Fujian	8
Shaanxi	8
Liaoning	8
Chongqing	5
Shandong	3
Hebei	3
Guizhou	3
Sichuan	2
Gansu	2
Anhui	1
Shanxi	1
Guangxi	1
Jiangxi	1
Heilongjiang	1
Xinjiang	1
Yunnan	1
Hong Kong	1

E. Distribution of Institutions of Highly Cited Papers

According to the survey, 205 highly cited papers came from 116 institutions. The Journal of Chinese Medical Association, Chinese Academy of Agricultural Sciences, Renmin University of China, Henan science and technology journal research center, Chinese Academy of Sciences, Wuhan University, China Institute of science and technology information and Tsinghua University published more than 5 highly cited papers respectively, Among the institutions that have published more than 2



articles, only the Journal of Chinese Medical Association, Chinese Academy of Agricultural Sciences, Henan science and technology journal research center, China Institute of science and technology information, the State Press and publication administration, China Academic Journal (CD-ROM) e-magazine, China Science magazine and Guizhou medical journal are not universities, It shows that colleges and universities are still important institutions for publishing research in China, and the document issuing institutions are shown in Table 5.

TABLE 5 DISTRIBUTION OF INSTITUTIONS PUBLISHING MORE THAN 2 HIGHLY CITED PAPERS

Issuing agency	Number of papers / piece
Journal of Chinese Medical Association	10
Chinese Academy of Agricultural Sciences	9
Renmin University of China	7
Henan science and technology journal Research Center	6
Chinese Academy of Sciences	6
WuHan University	6
China Institute of science and technology information	5
Tsinghua University	5
East China Normal University	4
Shanghai University of Technology	4
China Pharmaceutical University	3
State Press and Publication Administration	3
China Academic Journal (CD version) electronic magazine	3
Communication University of China	3
Shaanxi Normal University	3
Nanjing University	3
China Publishing Group Corporation	3
Hunan Mass Media Vocational and Technical College	3
Guangdong University of Foreign Studies	3
Dalian University of Technology	3
Beijing Normal University	2
Zhejiang University	2
Central University of Finance and Economics	2
Journal of Huaqiao University	2
China Science magazine	2
Beijing Institute of Graphic Communication	2
School of Arts, Bohai University	2
Hunan University	2
Jinan University	2
jiangsu university	2
Xiamen University	2
Xiangtan University	2
Xinxiang Medical College	2
Zhejiang Media College	2
Guangdong University of Finance and Economics	2
Guizhou Medical Journal	2
Fujian Institute of Engineering	2

have exerted a great influence on publishing industry research in China.

TABLE 6 DISTRIBUTION OF PROLIFIC AUTHORS AND INSTITUTIONS OF HIGHLY CITED PAPERS (STATISTICS BY THE FIRST AUTHOR)

Serial number	First author	Mechanism	Total documents issued
1	Weihong Cheng	Institute of Crop Science, Chinese Academy of Agricultural Sciences	9
2	Xueli Liu	Henan Science and Technology journal Research Center	5
3	Lan Peng	School of journalism, Renmin University of China	4
4	Guiqing Yuan	Journal of Chinese Medical Association	4
5	Suning You	Journal of Chinese Medical Association	3
6	Yanxia Wen	Hunan Mass Media Vocational and Technical College	3
7	Jianxun Zeng	China Institute of Science and Technology Information	3
8	Changshun Shi	School of Journalism and information communication, Huazhong University of Science and Technology	2
9	Hongling Fang	Journal of Xinxiang Medical College	2
10	Canjiao liu	School of Public Administration, Xiangtan University	2
11	Yun Qian	Editorial Department of Journal of Huaqiao University (NATURAL SCIENCE EDITION)	2
12	Shengli Ren	China Science Magazine	2
13	Wenliang Xie	Editorial Department of Journal of Guangdong University of Finance and Economics	2
14	Yiwen Yu	Editorial Department of Journal of Tongji University	2
15	Fanbin Zeng	Journalism and Communication, Jinan University	2
16	Jianhe Zhang	Editorial Department of Journal of Xinyang Normal University	2

F. Overview of Prolific Authors in Highly Cited Papers

According to their publications, we call those who have published 2 or more papers as prolific authors. Table 6 shows that there are 16 prolific authors from 2007 to 2016, and these 16 authors have published 49 highly cited papers in total, accounting for 23.9% of the total number of highly cited papers. Their published papers are of high academic level and

G. Analysis of Research Topics of Highly Cited Papers

According to the CLC number, which provides a scientific basis for the topic analysis of papers [5], the classification numbers of 205 highly cited papers were extracted, and those papers with multiple classification numbers were also included. Thus, a total of 214 classification numbers were



counted, and the classification numbers from more than two papers were listed in Table 7.

TABLE 7 ANALYSIS OF SUBJECT WORDS IN HIGHLY CITED PAPERS

Theme	Classification No. / piece	Proportion (%)
Journal Editing and Publishing	36	16.82
Publishing Automation	24	11.21
Communication Theory	22	10.28
Analysis and Research of Intelligence Data	16	7.48
Publishing Undertakings in Various Countries	14	6.54
Editorial Work	11	5.14
Publishing Industry in China	11	5.14
Editing and Publishing of Electronic Publications	9	4.21
Processing of Intelligence Data	6	2.80
Copyright Law	6	2.80
Automation and Networking of News Work	6	2.80
Communication Theory	3	1.40
Editing and Proofreading	3	1.40
Teaching Chinese as a Foreign Language	3	1.40
Publisher	3	1.40
Journalism	2	0.93
Edit	2	0.93
Journal Editing and Publishing	2	0.93
World Publishing	2	0.93
Information Retrieval	2	0.93
Methods and Tools		

Statistics show that the themes of 205 highly cited papers are relatively concentrated, including 36 "Journal Editing and publishing", 22 "Communication theory", 18 "Publishing automation", 16 "Analysis and research of information materials", 14 "Publishing undertakings of various countries", 11 "Editorial work" and 11 "Publishing undertakings of China", and "Electronic publication editing and publishing" 9 times, "Processing of information materials", "Copyright law" and "Automation and networking of journalism" 6 times each. These research topics are important topics or hot issues in the field of publishing research at present, and have certain guiding significance for the research and development of publishing industry.

IV. CONCLUSION

To sum up, we can draw the following conclusions: China Science and technology journal research, editorial journal, publication and distribution research, friends of editors, China Publishing and science and publication have published more than 15 highly cited papers, which are important journals for the research of publishing industry in China; Beijing, Shanghai, Henan, Hubei,

Jiangsu, Guangdong, Zhejiang, Fujian, Hunan, Shaanxi and Liaoning have all produced more than 5 highly cited papers, which are the concentrated output places of highly cited papers in China's publishing industry; The Journal of Chinese Medical Association, Chinese Academy of Agricultural Sciences, Renmin University of China, Henan science and technology journal research center, Chinese Academy of Sciences, Wuhan University, China Institute of science and technology information and Tsinghua University have published more than 5 highly cited papers respectively. They are important institutions for publishing research in China; Cheng Weihong, Liu Xueli, Peng LAN, yuan Guiqing, you Suning, Shi Changshun, Wen Yanxia, Zeng Jianxun and Fang Hongling have published more than 2 highly cited papers. They are prolific authors of highly cited papers in the publishing industry; The research topics of the highly cited papers mainly focus on journal editing and publishing, communication theory, automation of publishing work, analysis and research of information materials, publishing undertakings in various countries, editing work, publishing undertakings in China, editing and publishing of electronic publications, copyright law, automation and networking of news work, etc. Therefore, the editorial department of China's publishing journals should strengthen the selection and cultivation of productive areas, high-yield institutions, advantageous topics and backbone authors in the future work, and it is believed that there will be more highly cited papers with better quality.

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Author's biography with Photo



Zhongming Wei was born in October 1970 in Tai'an, Shandong province, China. He is an associate research librarian of Wanli Library of Taishan University. From August 1991 to July 1994, he graduated from the Chinese language and literature specialty of Tai'an Teachers College, and from July 2005 to July 2007, he graduated from the education management specialty of China Central Radio and Television University, mainly engaged in literature measurement and periodical evaluation research.