# A Visual Analysis of Citespace-based Fandom Research

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### **Abstract**

The study of rice circle culture governance has been a hot topic of academic research in recent years, and in 2021, the Central Internet Information Office issued the Notice on Further Strengthening the Governance of "Rice Circle" Disorder, which makes the study of rice circle culture governance a hot topic again. The governance of rice circle culture is conducive to promoting the implementation of government policies, maintaining network order and ensuring social stability. This paper mainly uses citespace visual analysis software to visualize and analyze the papers related to the topic of dining circle culture included in China Knowledge Network, mainly including: keyword clustering analysis, keyword co-occurrence network analysis, keyword burst detection, etc. By analyzing the process and key contents of the research on the governance of dining circle culture in China, we can detect the shortcomings and future development direction and trend of the research on the governance of dining circle culture in China. The future development direction as well as trends, to provide research reference for scholars studying related fields.

## **Keywords**

Fandom; Citespace; Bibliometrics.

### 1. Introduction

The "rice circle" is a fan culture phenomenon that arises along with the "nurturing" idol model, which was first introduced from Japan and South Korea, and has developed and spread in China to form a "rice circle culture" with its own characteristics [1]. " With the development of the Internet and the closer connection of the group, the star support group was formed, and the members of the group jointly financed, played the list, and fought against the black, forming a circle to establish the culture of the circle with certain rules and regulations. The practical activities within the "rice circle" not only show the collaboration, practice, and influence of subcultural groups formed independently under the Internet platform, but also warn us of the harm brought by the phenomenon of network group polarization [2], which should not be underestimated. Paying attention to the study of the rice circle culture and leading the subculture toward the mainstream culture has become the focus of social attention and an emerging hot spot for academic research. Bibliometrics is a quantitative analysis method based on the quantity of literature, which is mainly used to analyze the structure of literature content, distribution trends, and change patterns to detect the characteristics and patterns of scientific fields. bibliometrics has been widely used in various disciplines since the 21st century, mainly involving the study of the influence of journals or publications, the study of emerging hot trends, and the statistical analysis of papers in the field [3]. Regarding the research on development trends, representative literature includes"Analysis of the development trend of agricultural surface source pollution research based on bibliometrics" by Maofang Gao and Jianjun Qiu et al. [4]; "Comparative analysis of domestic and foreign information resource management research based on bibliometrics" by Junping Qiu and Jinyan Su et al. [5]; "Reshaping policy text data analysis with bibliometric research "by Jiang Li and Yuanhao Liu et al. "Origins, Migration and Methodological Innovation of Policy Bibliometrics"[6] show the outstanding advantages of

bibliometrics in the evolution of research topics. In this paper, with the help of scientific bibliometric methods, we use the China Knowledge Network database as an information platform to visualize and analyze the literature related to the topic of rice circle culture published in China Knowledge Network from 2006 to 2022, mainly keyword clustering analysis, keyword co-occurrence analysis, emergent detection, and emerging hotspot analysis, so as to detect the frontier of rice circle culture development and the hotspots of scholars' research in the field, point out the flaws of research In order to better align with the national policy and promote the comprehensive and healthy development of the rice circle culture under the guidance of mainstream culture.

# 2. Data and Methodology

Based on the database platform of China Knowledge Network, a total of 3120 documents were retrieved with the search expression of "JN=dining circle culture, fan culture", and after comparing and excluding documents and irrelevant documents (conferences, notices, reports, news), 2885 valid documents were retrieved. The exported literature in refworks format is shown in Figure 1. The data exported from each literature contains relevant information such as paper title, author information, references, year of publication, keywords and abstracts, which can effectively and accurately reflect the knowledge evolution of rice circle culture and the hot spots of scholars' research in this field in recent years.

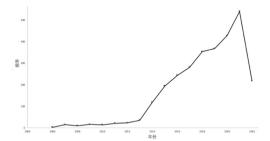


Figure 1. List of literature years

Documentary econometric analysis is a tool for analyzing the content of texts, analyzing the literature published in a specific field in a quantitative way, using its specific indicators and methods to study the trends and prospects of a topic [7].Citespace is an information visualization and analysis software based on the Java language that implements econometric analysis of documents in a specific field based on the theory of co-citation analysis and pathfinding network algorithms, in order to explore their evolutionary paths and trends [8]. thus exploring their evolutionary paths and trends [8]. It can perform institutional analysis, author analysis, institutional collaboration analysis, co-citation analysis, keyword co-occurrence analysis, etc. In this paper, we use Citespace 5.8R3 software to conduct bibliometric visualization analysis of 2937 documents published on China Knowledge Network in recent years, including cluster analysis, keyword co-occurrence analysis, and keyword emergent analysis, so as to explore the thematic lineage, knowledge evolution, and emerging hotspots of domestic scholars' research in the topic of rice circle culture.

#### 3. Thematic Context

Clustering analysis in Citespace is an important algorithm in the process of data mining, which refers to the formation of several classifications of the samples searched in the database according to their own attributes and laws without predefined criteria, so that the attributes of each sample within the same cluster maintain a high degree of similarity, and thus analyze the

distribution and evolution of topics in the research field [9]. The keyword clustering analysis was performed using Citespace analysis software on 2937 documents searched from the China Knowledge Network database, and the number of clusters identified by the LLR algorithm was 34, and the keywords corresponding to each cluster were also shown. Through research and analysis, the 34 clusters were matched and fused with their corresponding keywords on the basis of keyword cluster analysis, and the six clusters of rice circle culture research and their corresponding keywords were summarized, as shown in Figure 2.

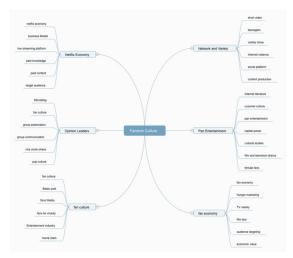


Figure 2. Thematic lineage

The first clustering related to the theme of rice circle culture in this paper covers the knowledge area of network and variety arts (23 articles), which mainly includes the keywords of short video, teenagers, variety arts programs, online violence, social platforms and content production. The frequency of short videos appears as high as 39 times, with a contour value of 0.963. 3563 literature records were searched through the keyword subject search of short videos in the database of China Knowledge Network, and the journal sources were selected as Peking University Core, CSSCI and CSCD, and the highly cited (cited more than 100 times) literature on the subject keyword of short videos was as high as 27, and the hot topics of its research were mainly The hot topics are about the establishment and operation of short video platforms; media integration, mainstream media and new media; mobile short video and short video news; production and dissemination of short video content and other related contents. The first representative study is Wang Xiaohong and Bao Yuanyuan [10], who analyze the development of mobile short video in today's society, the bottlenecks encountered and the future trends of its development by observing and studying WeTV, Seconds and cross-platform software such as: Vine and Instagram. Secondly, Peng Lan [11] analyzed the index changes of short video software such as Jitterbug, Racer and Watermelon video, and discussed that the rapid development of short video market is closely related to the development of new media and the promotion of capital power. The paper also suggests that the mass production of short videos is actually a new cultural movement from the bottom up, promoting the development and dissemination of folk culture.

The second clustered knowledge area is pan-entertainment (22 articles), which contains more keywords, only the first seven of which are selected, in order of online literature, consumer culture, pan-entertainment, capital power, cultural research, film and television drama and female fans. Among them, pan-entertainment appeared 18 times, with a profile value of 0.971. 620 documents were searched through the subject term search of pan-entertainment on China Knowledge Network, among which 16 were highly cited documents (cited more than 50 times), and the main contents of the studies were pan-entertainment, pan-entertainmentism, online

literature, social thinking and the phenomenon of pan-entertainment. Representative literature in the literature with the theme of pan-entertainment: Jiang Xiaoyan and Wang Liang [12] provide constructive opinions on IP operation and development in China by studying the phenomenon and trend of IP operation and development under the phenomenon of panentertainment with the perspective of typical foreign cases. Huang Yilin and Jiao Lianzhi [13] suggest that Internet culture has both advantages and disadvantages, among which the phenomenon of "pan-entertainment" in Internet culture is constantly impacting traditional values, which is not conducive to the establishment of socialist core values. The mass media manipulated by commercialization in today's society has further increased the development trend of "pan-entertainment", and it is necessary to fundamentally seize the discourse of online culture governance and strengthen online supervision so as to purify the online value ecology. The third knowledge mapping theme is fan economy (22 articles), and six major keywords are selected, namely fan economy, hunger marketing, TV variety show, movie text, audience positioning and economic value. The keyword of fan economy appeared as often as 754 times with a profile value of 0.963. A thematic keyword search of fan economy in the Knowledge Graph database yielded 235 literature records, including 16 highly cited (cited more than 50 times) literature, and the studies were mainly on fan economy, community economy, fan culture, online literature and business models. The most representative literature on fan economy is "Fan Economy Model in Social Network Era" by Cai Ti [14], which summarizes three typical economic models, namely, idol-centered star economy; traditional media-centered IP economy model; and community-centered business economy model. Secondly, Li Song [15] proposed in his article "The Capital Logic of China's Fan Economy and its Virtuous Cycle" that in the fan economy model, "fans" are not only consumers but also producers, and in order to deal with the virtuous cycle of the "fan economy", we should not only focus on the market benefits but also observe the cultural values. To handle the virtuous cycle of "fan economy", we must not only focus on market benefits, but also abide by the law of cultural development and value guidelines.

The fourth knowledge mapping theme is net popularity economy (20 articles), which mainly covers keywords such as net popularity economy, business model, live streaming platform, knowledge payment, content payment and target audience, etc. Net popularity economy appears 52 times with a profile value of 1. The subject term search of net popularity economy was conducted in the database of Zhiwang, and the source categories were selected as Peking University core, CSSCI and CSCD, and 84 documents were searched. Among them, 8 highly cited (cited more than 50 times) literature were searched, mainly studying the net popularity economy, net popularity phenomenon, net popularity culture and webcasting. In this research area, the representative literature: Wang Weibin [16] analyzed the reasons for the rise of net popularity economy by studying the inner logic of net popularity economy, revealed many drawbacks in the development of current net popularity economy, and gave some constructive opinions and measures in the light of the development characteristics of the times. Xi Luyang and Cheng Ming [17] study the business model and industrial system of the net-celebrity economy in the Internet+ era from the perspective of communication logic and business logic, and the paper emphasizes the need to explore the development model of the net-celebrity economy based on the two markets of information and consumption, and promote the netcelebrity economy as a specialized industrial system.

The fifth knowledge set of the cluster is opinion leaders (19 articles), which mainly includes key words such as "rice circle", group polarization, group communication, rice circle chaos and pop culture. The frequency of "rice circle" is 18 times. We searched for "rice circle" in the database of Zhiwang.com, and the source categories were Peking University Core, CSSCI and CSCD. 106 relevant articles were retrieved, among which 9 articles were highly cited (cited more than 20 times) with "rice circle" as the theme. The main contents of the research are intergenerational

rice circle, fan culture, fan groups, mainstream ideology, social governance and online expression. The representative literature: Hu Cen-Chen [18] summarized the three stages of the development of fan culture through the perspective of the fan controversy between Jay Chou and Cai Xu-Kun, and further proposed that the generational differences between fan cultures exist but are not irreconcilable, and their existence has its own value without high or low value. Zeng Qingxiang [19] proposed that firstly, the process of personal transformation from pure passerby to fan comes from three psychological mechanisms: self-projection, self-empathy and self-compensation. Secondly, when fans integrate into the rice circle, their identity logic changes from self-identification to group identity, and identity starts from cognition, which determines people's cognitive patterns, emotional attitudes and behaviors.

The sixth knowledge map topic is fan culture (14 articles), and its keywords are more numerous, only six of them are intercepted, in order of fan culture, Baidu posting, Sina Weibo, fan public welfare, entertainment circle and movie stars. The frequency of fan culture was as high as 325 times, with a contour value of 0.879. A subject term search through the database of China Knowledge Network searched a total of 187 documents with the keyword fan culture. Among them, there are 24 highly cited (cited more than 50 times) literatures, and the areas of research mainly include the study of fan culture, fan communities in the network era, media fan culture, and the behavior and psychological study of fans. Representative literature: Cai Ti [20] studied the mediating role played by the Internet in the process of fans' participation in media content production and the intrinsic nature of fan communities in the Internet from the perspectives of interpersonal, organizational, and group communication. The paper suggests that fan communities are actually a kind of interpretive space and imaginary community, where fans actively participate in fan culture and seek their own sense of existence, but it is ultimately an illusory existence, and to establish a positive and healthy fan culture it is necessary to distinguish the network from reality.

# 4. Evolution of Knowledge

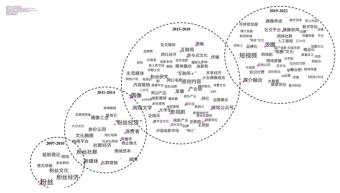
Keyword co-occurrence network analysis, also known as co-word analysis [21], is an analytical tool for studying the content of a text by analyzing the forms of co-occurrence of the same topic in a text, so as to study the relationship between related subject words in the field and provide research directions for the development of the subject area. Keywords are the core vocabulary of text research and represent the topic of article research. The analysis of high-frequency keywords helps to discover the hot spots of research in the subject area. In this paper, keyword co-occurrence network analysis is conducted from the perspective of time division. Figure 3 shows the keywords that appear more than 4 times in 15 years, and the time divided in the circle represents the year when the keyword first appears, and the larger the node font represents the more times the keyword appears. In addition, the figure also intuitively shows the centrality of the keywords. The closer the keywords are to the center of the circle, the stronger the centrality is, and the stronger the centrality means that the keywords are more influential in the contribution network and are the subject of the research in the time period as well as the hotspot and frontier of the academic research.

As shown in Figure 3, the themes of research in 2007-2010 were mainly the study of fan culture, fan economy, resistance theory, opinion leaders, fan groups, fans, and networks. 2011-2014 scholars broadened the scope of research, not only studying fan economy but also starting to study community economy, fan communities, consumers, idol industry, social networks, and emotional capital. 2015-2018 From 2015 to 2018, the research themes have become richer, mainly including idols, Internet, media convergence, netflix e-commerce, participatory culture, sharing economy, celebrity effect, pop culture, original content and fan studies, etc. From 2019 to 2022, scholars in this field gradually evolve into research themes on rice circle culture,

subculture, webcasting, group communication, online community, idol worship, self-identity, media fusion and idol formation are studied.

From 2007 to 2010, the study was mainly conducted through a single medium, the Internet, and the theory of resistance; from 2011 to 2014, the medium changed to microblogs and ecommerce platforms, and the theory of communication, popular culture, and Internet thinking. popular culture, and Internet thinking; 2015-2018 media types become more diversified, mainly through social media, variety movies, film and TV dramas, Internet+, live streaming platforms, mobile Internet, reality shows, and online novels, etc., and research theories become richer, involving the study of participatory culture, sharing economy, consumer culture, popular culture, circling and group polarization theories; 2019- 2022 communication media mainly evolve into forms such as homoerotic works, artificial intelligence, webcasting, big video, big data, social platforms, short videos, web dramas and stage plays, etc. Similarly, research theories have also changed, mainly the studies of sustainability theory, governance theory, group communication theory, branding and rice circle culture theory.

A comprehensive analysis shows that the knowledge evolution of rice circle culture research from 2007 to 2022 can be summarized as a gradual evolution from the original research on a single theory and related concepts of fan culture to an in-depth and detailed research on a specific object or platform, with a broader research theme and richer content, while beginning to pay attention to the integration with the media and focusing on the formation mechanism and governance of rice circle culture. Research. The media channels for the development of the rice circle culture are also in line with the times, from the original reliance on television and network to short videos, online live streaming, major social platforms and idol-raising variety shows, thus making the channels for obtaining information about the rice circle more diverse and comprehensive.



**Figure 3.** The evolution of knowledge in the study of rice circle culture

# 5. Emerging Hotspots

## 5.1. Keyword Emergent Hotspots

Keyword emergence is a special feature in Citespace that explores the emergence and development of hot topics or keywords during a certain period of time by studying the changes in citations and downloads of the literature during that period. The emergence of keywords indicates that a theme or topic is becoming a hot topic of academic interest, and the emergence of citations [22] further indicates scholars' recognition of the value of the literature and its contribution to their own research fields and topics. The emergent test is considered as a compass in the field of hotspot research, which can explore the trend of emerging hotspot development and provide scholars with directions to study high-frequency hot topics in different fields [23]. In order to explore the emerging hotspots in the research field of rice-circle culture, this paper conducted a keyword emergence test on the literature published in the database of China Knowledge Network in the past five years on the topics of "rice-circle culture"

and "fan culture", and selected the results of the past three years, and ranked them according to The results of the last three years were selected and arranged according to the intensity, as shown in Table 1.

From the results shown in the table, the keyword "rice circle culture" continued to explode in 2020-2022, with an intensity of 21.6, which is the keyword with the highest mutation intensity. "Live-streaming with goods", "emotional labor", "college students", "cyber violence", and "Fan consumption" will continue to explode from 2020 to 2022, with the lowest mutation rate of 3.23 for "fan consumption" and "cyber violence". "Subculture" and "short video" will continue to explode from 2019 to 2022. In general, "rice circle culture" has the highest burst intensity, which means it has emerged most frequently in the past three years, and is a hot topic in the current research.

**Table 1.** Keyword burst detection

Keyword burst	Strength	Time
Rice circle culture	21.6	2020-2022
Live Streaming with Goods	6.88	2020-2022
Subculture	5.76	2019-2022
College students	4.46	2020-2022
Short Video	3.33	2019-2022
Emotional labor	3.25	2020-2022
Internet violence	3.23	2020-2022
Fan Consumption	3.23	2020-2022

### 5.2. Emerging Hotspots in the Literature

In order to further explore the emerging hotspots of academic interest, the keywords "rice circle culture", "fan culture", and "rice circle" were searched through the China Knowledge Network database. "Based on the number of downloads and citations, we found and analyzed 30 articles (10 articles per year) with high research hotspots from 2020 to 2022, as shown in Table 2. The number of citations in the last few years after the publication of the literature indicates the hotness of research in the field, and the number of downloads reflects the popularity of the literature. The literature in the table below is ranked according to the number of citations, where the number of citations is in parentheses and the number of downloads is outside of parentheses.

In 2020, the topics of hot literature are the formation of "rice circle", the medium of rice circle culture development, the deep mechanism of rice circle culture, the construction of youth values, and the logic of "rice circle" identity, etc. In 2021, the topics of hot literature are the chaos of rice circle, the reflection of rice circle culture, and the reflection of fan culture. In 2021, the hot topics of literature include the disorder of the rice circle, reflection on the rice circle culture, fan culture and public opinion guidance, value logic of fan culture, cultural perspective and variety entertainment, etc. In 2022, the topics of literature with higher attention include mainstream ideology of the Internet, development strategy of mainstream media, fan culture and network IP, the era of pan-entertainment, idol economy, the harm of rice circle culture and governance research. The analysis concludes that the hot literature in 2020 mainly focuses on the study of the formation mechanism of the rice circle culture, exploring the essence and mechanism of the formation of the rice circle, and the high attention literature in 2021-2022 pays more attention to the study of the influence, harm and governance of the rice circle culture, emphasizing that the development of the rice circle culture should be in line with the development of the times, consistent with the national policy, and focusing on the construction and maintenance of the laws and regulations of the rice circle.

**Table 2.** Highly popular literature published on CSSCI, 2020-2022

<b>Table 2.</b> Highly popular literature published on CSSCI, 2020-2022			
2022	2021	2020	
1. Ling Xiaoxiong, Wei Kaihong. The elimination of the "rice circle culture" and the statute (15) 3435	1. Ji Weimin. Warning against the "rice circle" chaos eroding the values of the young generation (16) 3317	1. Hu Cenzen. From "star- catchers" to "rice circle" (61) 11804	
2. XI Zhiwu, LI Huaying. The potential risk of "rice circle culture" to the mainstream ideology of the network and management measures (15) 3799	2. Hu Yong, Liu Chunyi. The Mirror of Reality: The Social Symptoms Behind the Dixie Culture (14) 10759	2. Song Cheng. "Slow Live Streaming" and "Rice Circle Culture": A Communication Interpretation of "Cloud Supervisors" (28) 6896	
3. Guo Lu. Mainstream media's strategy of "rice circle" in the context of media integration (11)1116	3. Wang Wei. Cultural perspective of "rice circle" and ecological reconstruction of variety and entertainment content (12) 3669	3. Zeng Qingxiang. The logic of identity in the "rice circle": from individual to community (28) 3655	
4. Huang Wen,Zhu Ziyue. Fan Culture and Online IP Adaptation Drama:Reflections Based on Social Practice Theory (11) 1333	4. Huang Chuxin. Alerting to the influence of the "rice circle" culture on youth under the hostage of capital (12) 3279	4. Meng Wei. The Growth and Reflection of "Rice Circle" Culture (25) 5403	
5. Li Yuan. On the legal regulation of "rice circle" (11) 1772	5. Lin Shengdong. Controversies and governance of the "rice circle" (11) 2008	5. Gong, Jack, Zhao, Fujiang. Analysis of the causes and suggestions of countermeasures for the influence of "rice circle culture" on youth values (13) 3308	
6. Niu Wenke. The deformed fan culture and idol economy in the era of pan-entertainment (10) 1738	6. Yan Qing, Hou Hanbo. Fan Culture as a Symptom: The Value Logic and Possible Path of Social Integration (11) 2709	6. Shen Lin, Gao Jing. Characteristics of online variety shows in the context of fan culture (11) 3387	
7.Yang Zhao. Using things as media: The triple dimension of fan culture consumption (10) 1371	7. Zhang Yiwu. Reflections on "rice circle culture" (9) 3473	7. Yuan Zhixiang. The construction of youth subject consciousness in the "rice circle culture" (11) 4531	
8. Zhang Junli, Fang Mingdong. The lost carnival: the misconduct of "rice circle culture", its causes and governance (10) 4186	8. Wang Qian. Reason and emotion: An analysis of fan culture and public opinion guidance (9) 1221	8.You Hongxia, Tian Zhaoyuan. Inheritance and development of intangible cultural heritage in the context of fan culture (8) 2102	
9. Yang Zezhu. The causes, hazards and remedial measures of the "rice circle" chaos (10) 1981	9. Yan Fangjie. The generation mechanism and internal logic of "nurturing" idols and their "fan" culture (8) 3284	9. Academic Frontier, ed. The deep mechanism of "rice circle" culture (3) 1763	
10. Zhu Xiaojuan. The negative impact of "rice circle" culture and its governance path (9) 2800	10. Chang Jiang, Zhu Sibi. Fan Culture: Scope, Changes and "Out of the Circle" (8) 2929	10. Wei Pengju. The future of creativity economy from the culture of "rice circle" (8) 2304	

## 6. Conclusion and Prospect

### 6.1. Conclusion

Through the use of citespace software to visualize and analyze the rice circle culture in China, preliminary conclusions were drawn after studying the statistics. The scope of rice circle culture research is expanding and becoming richer, and the current development status, main features, emerging hotspots and development trends of the field were explored by searching and analyzing relevant literature in the database of China Knowledge Network from 2000 to 2022 [24]. First, the number of published literature on topics related to rice circle culture was relatively small and the growth trend was relatively flat from 2006 to 2013, and fluctuated from 2013 to 2022, with a large increase in the number of published literature, indicating that scholars began to pay attention to the research in this field during this period. Second, the keyword co-occurrence network analysis clearly shows the evolution of keywords and the keywords included in each period. 2007-2010 the keywords in this period are mainly fan culture, fan economy, boycott theory, and fan groups. 2011-2014, on the other hand, the research on community economy, fan communities, and consumers began to focus on the content. 2015-2018 gradually the research on idols, Internet, media convergence, and netflix ecommerce is extended. 2019-2022, the research on rice circle culture, subculture, webcasting, group communication, and online community begins. From the knowledge evolution map of the rice circle culture, scholars focus on group research, theoretical research and social platform research, focusing on the cause mechanism of fan group formation and theoretical sources, so as to summarize the mechanism and rules of the internal operation of the rice circle culture [25]. Finally, the detection of rice-circle culture through keyword emergence, live banding and college students are the frontiers of research on the topic of rice-circle culture and are hot topics for future scholars' research in this field.

#### 6.2. Outlook

With the development and wide application of mobile Internet, the research channels of the rice circle culture are more and more diversified and the forms of presentation are more diversified, and scholars have wider access to information when studying related topics, which makes the content of rice circle culture research richer, but with the development of the network, the scale of the rice circle is also getting bigger and bigger, and the phenomenon of group polarization is more and more serious, so how to guide the healthy development of the rice circle culture has become a hot topic in society. On August 27, 2021, the Central Internet Information Office also issued a notice on further strengthening the "rice circle" chaos, emphasizing the need to increase governance efforts, tighten and compact the main responsibility of the website platform, and strike hard to solve the problem of "rice circle" chaos, which has already This has become a social issue of concern to the government. In the future, scholars in this field should focus on how to guide the development of the rice circle culture in the direction of mainstream culture and explore the essence of the problems that arise in the development of the rice circle culture, and give some constructive opinions on the development of the rice circle culture.

### References

- [1] Jiang Wenjia. An analysis of the "rice circle culture" in the field of communication [J]. Southeast Communication, 2019(06):51-53.
- [2] Frontiers of Scholarship, eds. The deep mechanism of "rice circle" culture [J]. People's Forum Academic Frontier, 2020(19):4-5.
- [3] Ren Hongjuan, Zhang Zhiqiang. Research on the development of scientific knowledge mapping based on bibliometrics[J]. Journal of Intelligence, 2009, 28(12):86-90.

- [4] Gao Maofang, Qiu Jianjun, Liu Sanchao, Liu Hongbin, Wang Ligang, Pang Huancheng. Analysis of the development trend of agricultural surface source pollution research based on bibliometry [J]. China Agricultural Science, 2014, 47(06):1140-1150.
- [5] Qiu Junping,Su Jinyan,Xiong Zunyan. A comparative analysis of domestic and foreign information resource management research based on bibliometrics[J]. Chinese Journal of Library Science, 2008 (05):37-45.
- [6] Li Jiang, Liu Yuanhao, Huang Zui, Su Jun. Reshaping policy text data analysis with bibliometric research the origin, migration and methodological innovation of policy bibliometry[J]. Journal of Public Administration,2015,12(02):138-144+159.
- [7] ZHI W, JI G. Constructed wetlands, 1991 2011: a review of research development, current trends, and future directions[J]. Science of the total environment, 2012, 441: 19 27.
- [8] Chen Yue, Chen Chaomei, Liu Zeyuan, Hu Zhigang, Wang Xianwen. Methodological functions of CiteSpace knowledge graphs [J]. Scientology Research, 2015, 33(02): 242-253.
- [9] OLAWUMI T O, CHAN D W M. A scientometric review of global research on sustainability and sustainable development [J]. Journal of cleaner production, 2018, 183: 231 250.
- [10] WANG X H,BAO YUN YUAN,Lv Q Q. The development status and trend observation of mobile short video[J]. China Editor,2015(03):7-12.
- [11] Peng Lan. Short video: the "genetic modification" and re-cultivation of video productivity[J]. Journalism, 2019(01):34-43.
- [12] Jiang Xiaoyan, Wang Liang. Research on IP operation mode under pan-entertainment environment [J]. Technology and Publishing, 2016(05):23-27.
- [13] Huang Yiling, Jiao Lianzhi, Cheng Shiyong. The cultivation of socialist core values identity in the context of "pan-entertainment" of network culture[J]. Hubei Social Science, 2016(11):175-182.
- [14] Cai Ti. The fan economy model in the era of social networking [J]. China Youth Studies, 2015(11):5-11.
- [15] Li Song. The capital logic of China's "fan economy" and its virtuous cycle [J]. Journal of Shandong Normal University (Humanities and Social Sciences Edition), 2019, 64(01):87-96.
- [16] Wang Weibing. The generation logic, ethical reflection and normative guidance of netroots economy [J]. Seeking truth,2016(08):43-49.
- [17] Xi Luyang, Cheng M. Experimental discussion on net popularity economy and its development path based on the dual perspective of communication logic and commercial logic [J]. Enterprise economy, 2017, 36(12):102-108.
- [18] Hu C. C. From "star-catchers" to "rice circle"--the "changes" and "changes" of fan organizations in China [J]. The "change" and "no change" of fan organizations in China [J]. China Youth Studies, 2020 (02): 112-118+57.
- [19] Zeng Qingxiang. The logic of identity in the "rice circle": from individual to community[J]. People's Forum-Academic Frontier,2020(19):14-23.
- [20] Cai Ti. Internet and the development of fan culture[J]. International Journalism, 2009(07):86-90.
- [21] LI X, WU P, SHEN G Q, et al. Mapping the knowledge domains of Building Information Modeling (BIM): a bibliometric approach []]. Automation in construction, 2017, 84: 195 206.
- [22] POLLACK J, ADLER D. Emergent trends and passing fads in project management research: a scientometric analysis of changes in the field [J]. International journal of project management, 2015, 33 (1): 236-248.
- [23] Pan L, Wang S. Hot areas and frontier themes in education research in the last decade: an econometric analysis based on keyword co-occurrence knowledge mapping in eight education journals from 2000 to 2009[J]. Educational Research, 2011, 32(02):47-53.
- [24] Ma Chao, Chen Yali. A visual analysis of domestic and international network governance research based on Citespace and Vosviewer[J]. Journal of Southwest University for Nationalities:Humanities and Social Sciences Edition.

[25] Li Yunfeng. Analysis of the progress and trends of China's network governance research based on CiteSpace[J]. Governance Modernization Research, 2020, 36(1):5.