

Hotspots in Research on “Joint Home-Kindergarten Education” in China and Its Future Trajectory

—A Visual Analysis Based on the CNKI Database (1999-2022)

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Abstract

This article presents a quantitative visual analysis of 500 research papers on joint home-kindergarten education from the CNKI, utilizing the CiteSpace software. The results indicate that research on joint home-kindergarten education has undergone a period of preliminary exploration marked by cooperative strategies and approaches, followed by a period of idea-resource integration that focused on promoting children’s development. At present, the collaboration between authors and institutions in the research on joint home-kindergarten education is inadequate, and research organizations are yet to establish closely-knit teams for cooperation. The research primarily focuses on the object, content, and dilemma of joint home-kindergarten education, along with the corresponding approach to it. It is anticipated that China will intensify its investigation into joint home-kindergarten education through the provision of greater resources to research teams at an organizational level, and through the clarification of the underlying concept at a content level.

Keywords

Joint Home-Kindergarten Education, CiteSpace, Research Hotspots, Trend Projection

1. Introduction

Joint home-kindergarten education is an educational strategy wherein the family microsystem and the kindergarten microsystem collaborate purposefully and systematically to harmonize their educational objectives, curriculum, and instruc-

tional approaches, with the utmost aim of fostering comprehensive growth in children. According to the theory of overlapping spheres of influence, the spheres of family education, kindergarten education, and the social environment are both distinct from one another and exert a reciprocal influence, resulting in a confluence of effects on children's development. It is only through the harmonization of home-kindergarten education that the family sphere can align with the kindergarten sphere, thereby fostering a robust educational ecosystem and facilitating educational synergy. The Chinese government has issued a series of official documents that underscore the significance of joint home-kindergarten education. These include the "Regulations on Kindergarten Work (Trial)" of 1989, the "Guidelines on Kindergarten Education (Trial)" of 2001, the "Opinions on the Parents Committee in Primary and Secondary Schools and Kindergartens" of 2012, and the "Guide to Assessing Kindergarten Education Quality" of 2022. These documents have served as guiding principles for the research on joint home-kindergarten education, which has undergone a transition in scholarly discourse from home-kindergarten communication to home-kindergarten cooperation, home-kindergarten education, and the formation of a home-kindergarten education community. This article utilizes the CiteSpace software to systematically classify the body of literature pertaining to joint home-kindergarten education in China. By doing so, it sheds light on the current infrastructure and evolutionary trajectory of research within this domain and offers valuable insights into the future development of research on joint home-kindergarten education, thereby serving as a valuable reference for future research endeavors and facilitating its comprehensive advancement.

2. Data and Methods

2.1. Data Sources

The data utilized in this article was sourced from the journals published within the Chinese National Knowledge Infrastructure (CNKI), up until the date of December 3, 2022. A total of 500 articles were procured based on the keyword "joint home-kindergarten education". The initial article concerning joint home-kindergarten education surfaced in the year 1999. The acquired data was exported in Refworks format. The raw data set underwent manual curation to remove extraneous materials, specifically those irrelevant to the subject of joint home-kindergarten education, including but not limited to, meeting minutes, book reviews, and interviews. Subsequently, a refined corpus comprising 428 pertinent papers was acquired to serve as the primary data resource for this investigation.

2.2. Research Tools and Methods

CiteSpace, a knowledge map analysis software, was developed by Professor Chen Chaomei of Drexel University in Philadelphia, utilizing Java as its foundation. This software possesses the capability to scrutinize the current state, focal points,

and advancement patterns within associated domains, relying on authorship, institutional affiliations, and the evolution of keywords. Its recognition as a globally esteemed knowledge map analysis software is widely acknowledged. Since 2015, Chinese scholars specializing in early childhood education have started to employ CiteSpace in their research activities. To date, they have penned 72 papers on the subject of early childhood education, with only one focused on joint home-kindergarten education. That particular paper, titled “Hotspots and Trends in China’s Joint Home-Kindergarten Early Childhood Education in the Past Ten Years—A CiteSpace-based Visual Analysis” (2019), uses data from the period of 2008-2018, which is now nearly five years in the past. Therefore, it can no longer be deemed as “avant-garde” research. Furthermore, the short duration encompassed by this study restricts its ability to effectively illustrate the evolutions in the research on joint home-kindergarten education in China. In this study, the data was analyzed using CiteSpace. The time slice was set to “1 year” and the node types selected were “author”, “institution”, and “keyword”, with a threshold set at Top 50 (data with a citation frequency among the Top 50 in each event slice). The routing network was ticked, while other settings were maintained as default options. The results were obtained through Log-likelihood Rate (LLR) cluster analysis.

3. Research Results and Analysis

3.1. Research Strength in Joint Home-Kindergarten Education

3.1.1. Analysis of Authors in the Field of Joint Home-Kindergarten Education

1) Core Authors

The scientific community recognizes authors as the primary driving force behind scientific research, as their research prowess directly influences the quantity and quality of their scholarly output (Hu & Long, 2016). Core authors are recognized for their significant accomplishments, consistent engagement in scholarly pursuits, and profound impact within their respective fields of study (Su et al., 2010). These individuals propel research endeavors to unprecedented levels of sophistication, while simultaneously assuming a pivotal role in shaping disciplinary advancements. Price’s Law is a formula widely acknowledged in academic circles, used for estimating the volume of papers produced by core contributors within a specific field. In this formula, the variable M represents the minimum quantity of papers generated by core authors, while N denotes the number of papers produced by the most prolific authors during a specified period of statistical observation. For the area of study focused on joint home-kindergarten education, the most prolific authors have published 3 papers. Employing Price’s Law, M can be approximated as 1.30, rounded up to 2. Based on this, it can be inferred that core authors are those who have produced two or more papers related to joint home-kindergarten education. These total to 21 individuals, as per available statistical data. Based on Price’s Law, the establishment of a high-yielding author group in a discipline is deemed secure only when the number of papers

published by core authors represents 50% of the total (Wu et al., 2022). Calculations reveal that the aggregate quantity of papers published by core authors in the field of joint home-kindergarten education stands at a mere 10% of the overall output. This suggests that research on joint home-kindergarten education is still at a formative stage and that a stable core author group has yet to emerge. Furthermore, it is noteworthy that a substantial proportion, up to 90% in fact, of published papers in a given journal originate from authors who have contributed only once. According to the Long Tail theory propounded by Chris Anderson, a renowned American editor-in-chief, the majority of these authors' investigations tend to be impromptu in nature, thereby often lacking the requisite sustainability and depth typically associated with comprehensive research endeavors.

2) Analysis of the Author Cooperation Network

The phenomenon of author co-occurrence holds the potential to provide valuable insights into the collaborative dynamics among researchers investigating the field of joint home-kindergarten education (Wu et al., 2022). This study utilized the CiteSpace software to analyze the author co-occurrence network in research on joint home-kindergarten education. The software was configured with specific parameters, including setting the Node type to Author, the threshold parameter to Top 50, the time span to 1999-2022, and the time slice to 1 year. The resulting diagram (Figure 1) displays nodes representing authors, with the size of each node reflecting the number of articles published by the respective author. The thickness of the connecting lines indicates the level of collaboration between authors, with thicker lines denoting closer cooperation. Figure 1 illustrates a cooperative network consisting of 338 nodes and 63 connecting lines, exhibiting a low cooperative network density of 0.0011 (<0.1). This suggests that

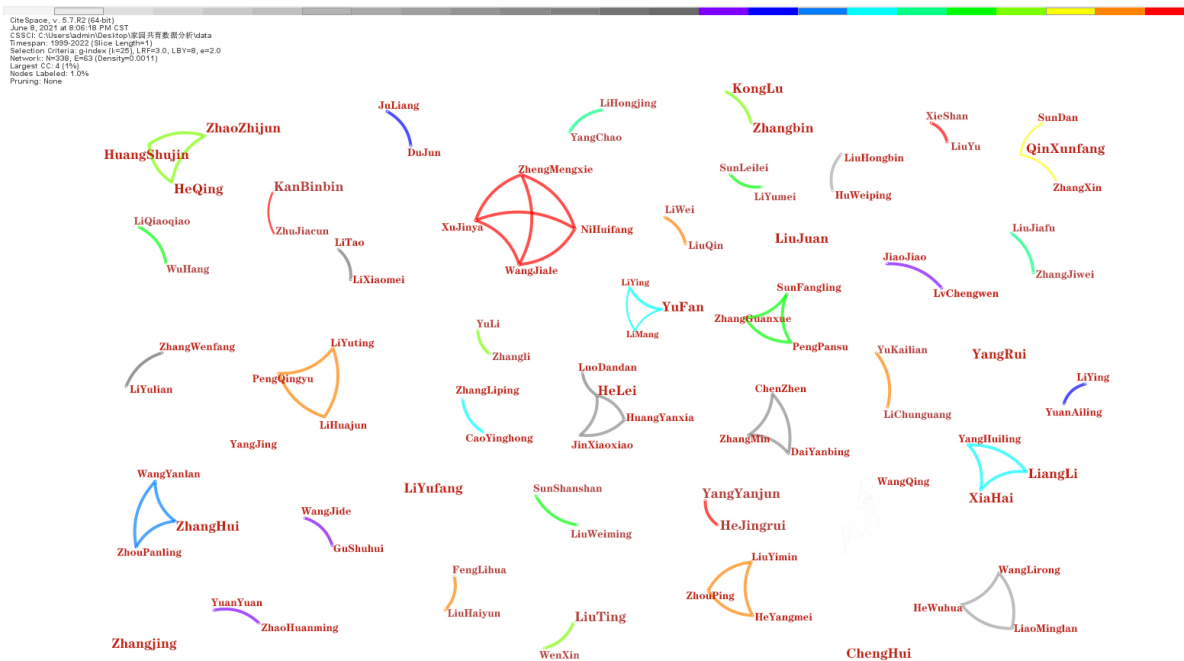


Figure 1. Diagram of the cooperation network of authors studying joint home-kindergarten education in China.

the research collaboration among authors is fragmented. Regarding specific cooperative relationships, the research team led by Zhang Mengxie at Zhejiang Normal University demonstrates the most elevated degree of research collaboration. Their primary research focus centers on the emotional intelligence of early childhood educators from a vocational standpoint. The He Lei team, also affiliated with Zhejiang Normal University, exhibits the second highest level of research collaboration, with their primary research emphasis on the application of information technology in joint home-kindergarten education. The team composed of Xia Hai, Zhang Hui, and Zhao Zhijun displays the third highest level of collaboration, with their primary research topic centered on home-kindergarten communication.

3.1.2. Analysis of Institutions in the Field of Joint Home-Kindergarten Education

1) Core Institutions

315 research institutions are involved in the study of joint home-kindergarten education. One particular institution has achieved the highest publication count, amounting to 11 papers. According to Price's Law, institutions that have published four papers or more are defined as core research institutions. Application of statistical analysis to the dataset reveals that a mere nine out of the 315 institutions can be classified as core research institutions, constituting a mere 2.86% of the total. These institutions, ranked in descending order based on the quantity of their publications, are as follows: Shanxi Xueqian Normal University, Heilongjiang Institute of Teacher Development, Shenyang Normal University, Dingxi Anding District Kindergarten, Zhejiang Normal University, Lianyungang Normal College, Guangxi Normal University, Hubei Preschool Teachers College, and Anhui Normal University (see **Table 1**). In regard to the categorization of core institutions, normal colleges and universities serve as the primary driving force behind the research on joint home-kindergarten education, while kindergartens allocate comparatively lesser attention to this sphere. This observation

Table 1. Ranking of core research institutions in the field of joint home-kindergarten education.

Number	Institution	Quantity of papers published
1	Shaanxi Xueqian Normal University	11
2	Heilongjiang Institute of Teacher Development	9
3	Shenyang Normal University	8
4	Dingxi Anding District Kindergarten	6
5	Zhejiang Normal University	6
6	Lianyungang Normal College	6
7	Guangxi Normal University	5
8	Hubei Preschool Teachers College	4
9	Anhui Normal University	4

underscores the positive influence that professional research conducted by normal colleges and universities exerts on the exploration of joint home-kindergarten education.

2) Analysis of the Institution Cooperation Network

An analysis of the cooperation network of paper-publishing institutions using the CiteSpace software can shed light on the core institutions studying joint home-kindergarten education and their cooperative relationships, collective accomplishments and main contributions (Garfield, 1985). The present study employed the CiteSpace software to investigate the co-occurrence network of authors within the field of joint home-kindergarten education. Specifically, the Node type was designated as Institution, the threshold parameter was operationalized as Top 50, the time span was delimited to 1999-2022, and the time slice was set to 1 year. The resulting graphical representation of the author co-occurrence network is depicted (see Figure 2). Figure 2 illustrates an author co-occurrence network consisting of 315 nodes and 34 connecting lines, with a network density of 0.0007 (<0.1). This observation suggests that the level of collaboration among research institutions is insufficiently robust. Within the 15 collaboration pairs, there exist 7 pairs involving universities, 7 pairs involving a university and a kindergarten, and 1 pair involving two kindergartens. One notable advantage of university teachers lies in their possession of professional knowledge and expertise in research methodologies, whereas kindergarten teachers excel in their practical experience gained from working directly with children. By fostering collaboration between universities and kindergartens, it becomes possible to leverage the strengths of both parties and facilitate an improved comprehension of

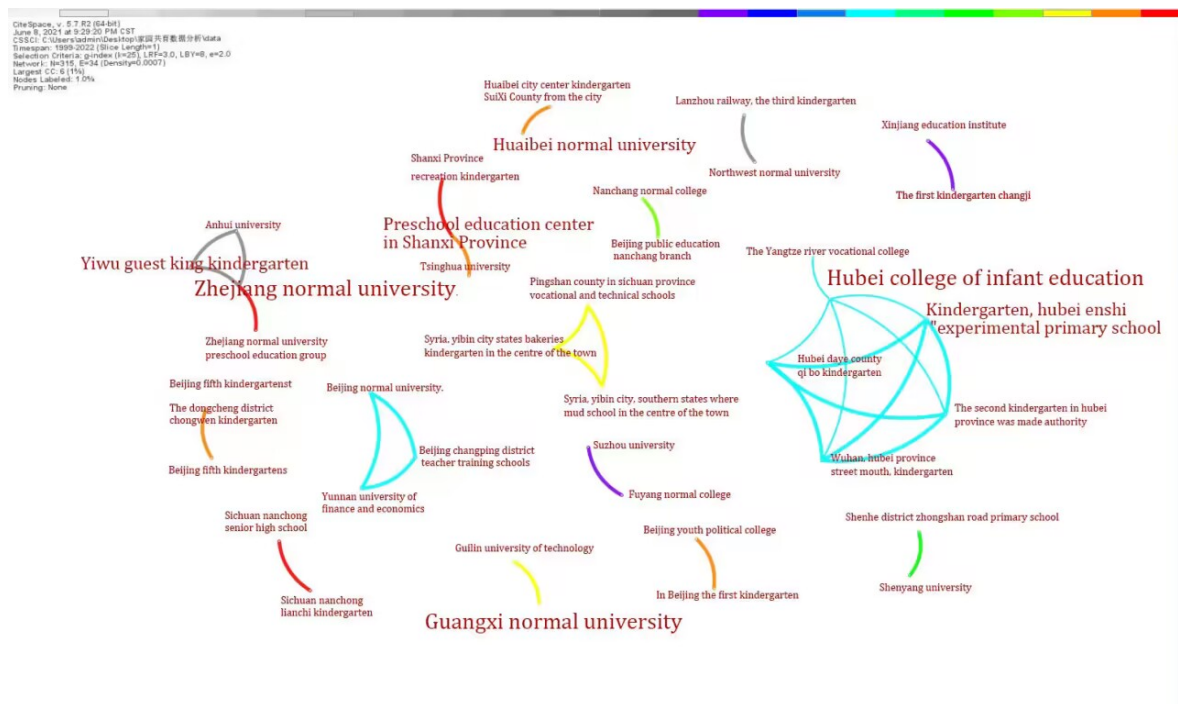


Figure 2. Diagram of the cooperation network of institutions studying joint home-kindergarten education in China.

early childhood education research and its practical implementation within kindergartens. Research endeavors have the potential to enhance teaching practices and foster a seamless integration of theoretical knowledge and practical application. Hence, the future trajectory should focus on fostering research collaboration between universities and kindergartens.

3.2. Analysis of Research Hotspots

Research hotspots refer to areas of scientific inquiry that are currently receiving a lot of attention and funding from researchers and academic institutions (Chen et al., 2015). Keywords serve as a means of condensing and encapsulating the fundamental content of an article (Chen, 2004), thereby offering a concise representation of its primary ideas. By conducting an examination of the prevalence of keywords that appear frequently, it becomes possible to uncover the prevailing focal points within the realm of research pertaining to joint home-kindergarten education. This article presents a keyword clustering diagram of research on joint home-kindergarten education in China using the CiteSpace software (see Figure 3). Figure 3 exhibits 436 network nodes, each representing a distinct keyword, and 558 connecting lines which represent keyword co-occurrence, constituting a clustering topic comprised of 10 irregular areas. The modularity Q value, which stands at 0.8616, exceeds the threshold of 0.3. The Weighted Mean Silhouette value, measuring 0.9683, surpasses the threshold of 0.7. These results point to a robust clustering of network structure, thereby emphasizing the cohesive and homogeneous characteristics of the individuals within each

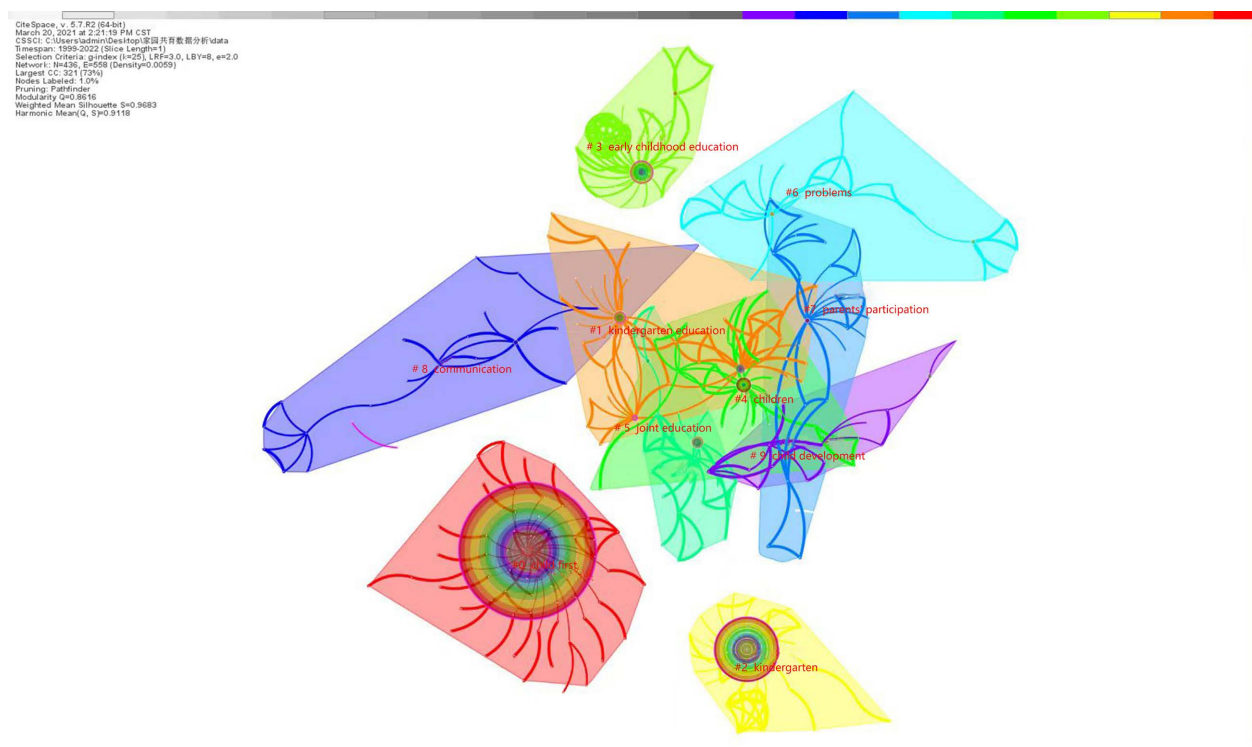


Figure 3. Diagram of keyword clustering in research on joint home-kindergarten education.

clustering topic (Chen et al., 2009). The 10 clustering topics are “child first”, “kindergarten education”, “kindergarten”, “early childhood education”, “children”, “joint education”, “problems”, “parents’ participation”, “communication” and “child development”. In order to conduct a more visually-oriented examination of keyword clustering, the LLR algorithm was employed to collect information about primary keywords within each cluster (see **Table 2**).

Based on a logical semantic framework operating within the realm of clustering topics, prominent areas of research pertaining to joint home-kindergarten education in China encompass the subsequent themes:

3.2.1. The Executor of Joint Home-Kindergarten Education

Clusters related to research on the executor of joint home-kindergarten education include “# 2 kindergarten”, “# 4 children” and “# 7 parents’ participation”. The main keywords in these clusters are “win-win cooperation”, “information technology means”, “family”, “preparation for kindergarten entrance”, “cognition of participation” and “attitude towards participation”. Joint home-kindergarten education constitutes a multifaceted framework of educational interaction. The educational principles, joint education willingness, and pedagogical competencies of early childhood teachers and parents collectively shape the structure, comprehensiveness, and efficacy of joint home-kindergarten education. In the perspective of early childhood teachers, a deficiency in intimate collaboration with parents is evident. While kindergartens require parental involvement, there

Table 2. Distribution of primary keywords in clustering topics.

Number	Clustering topic	S value	Primary keywords
0	Child first	1	Joint home-kindergarten education; Pre-preparation; Children’s learning; Informatization; Basic concepts
1	Kindergarten education	0.947	Joint home-kindergarten education; Family education; Primary school style education in early childhood; Parents of young children; Parents’ education
2	Kindergarten	0.999	Habit of listening; Win-win cooperation; Children of top kindergarten classes; Future society; Information means
3	Early childhood education	0.998	Happy growth; Information technology; Home-kindergarten cooperation; Family influence; Role play
4	Infant	0.889	Family dynamics; Meaning; Exploration; Methods; Learning community
5	Joint education	0.903	Closeness; Professional guidance; High-quality companionship; Joint home-kindergarten education efforts; Interaction
6	Problem	0.953	Measures; Practical measures; Child-care quality; Rural areas; Integration of child-care and education
7	Parental involvement	0.977	Preparation for kindergarten entrance; Cognition of participation; Attitude towards participation; Subjective norm; Domain of overlapping influence
8	Communication	0.974	Early childhood teachers; Empathy; Home-kindergarten communication; Analytical psychology; Habit acquisition
9	Child development	0.966	Tutoring guidance; Path; Transition from kindergarten to primary school; Modern information technology; Home-kindergarten interaction

is a dearth of joint exploration into children's educational development. Some kindergartens lack experience and requisite competencies in home-kindergarten education (Yang et al., 2022). From a parental perspective, families possess distinctive educational requirements. Certain families prioritize the enhancement of their children's abilities, some emphasize the mastery of knowledge, and some focus on fostering their children's social skills or interests. The diverse educational needs exhibited by families contribute to the intricate nature of joint home-kindergarten education, thereby elevating the demands placed on early childhood educators' professional competence. Currently, there is a deficiency in the expertise and competence of early childhood teachers in facilitating joint home-kindergarten education. Consequently, the communication and educational efforts of homes and kindergartens have proven ineffective in addressing significant issues within early childhood education, such as the unresolved matter of parents prioritizing their children's knowledge acquisition. The educational strategies employed lack relevance, efficacy, and depth, and private kindergartens succumb to the pursuit of utilitarian educational objectives due to parental influence. Parents' industry backgrounds are a significant influence in the realm of early childhood education, as they possess ample social resources that can offer a wide range of educational content for kindergartens, as well as provide various forms of support to cater to children's educational needs (Fang, 2002). Concurrently, the expectations and oversight parents have regarding kindergarten education play a pivotal role in fostering the advancement of early childhood education. Nonetheless, the existing collaboration between homes and kindergartens fails to fully acknowledge parents' childcare requirements, and the discrepancy in social status between homes and kindergartens contributes to a lack of parental cooperation. This issue can have a detrimental impact on the effectiveness of joint home-kindergarten education. Joint home-kindergarten education is a product of the intellectual endeavors of both teachers and parents, with the ultimate goal of fostering the holistic growth of children. In order to ensure its effectiveness, it is imperative to examine the expertise exhibited by early childhood teachers, address the challenges encountered in joint home-kindergarten education, and cultivate a strong willingness among parents to actively participate. Additionally, it is crucial to enhance the leadership qualities of those responsible for executing the joint home-kindergarten education program.

3.2.2. The Content of Joint Home-Kindergarten Education

Clusters pertaining to the domain of joint home-kindergarten education encompass various aspects, namely "# 0 child first", "# 1 kindergarten education", "# 3 early childhood education", "# 5 joint education", and "# 9 child development". Table 2 provides an exposé of the principal keywords associated with these clusters, which encapsulate the notions of "informationization", "home-kindergarten cooperation", "family education", "parental education", "information technology", and "interaction". The content of joint home-kindergarten education refers to the area of cooperation between homes and kindergartens, as

well as specific issues. It is the foothold of and key to home-kindergarten cooperation, playing a guiding role in joint home-kindergarten education. Studying the content of joint home-kindergarten education can enable families and early childhood teachers to understand “what to educate jointly” and “how to educate jointly”. This can promote the implementation of joint home-kindergarten education, help children at home elevate the good qualities they cultivate in kindergartens, and ensure consistency between home education and kindergarten education. Currently, there is a dearth of scholarly research on the substance of joint home-kindergarten education. Existing studies primarily concentrate on the compilation of experiences pertaining to joint home-kindergarten education, encompassing aspects such as the development of children’s daily routines, rectification of behavioral issues, moral cultivation, and adaptability. However, these investigations lack a comprehensive and methodical approach. The absence of theoretical guidance in the implementation of joint home-kindergarten education has emerged as a prominent issue. Kindergartens currently conduct joint home-kindergarten education activities based on their individual interpretations. Consequently, these activities primarily encompass notifications, children’s open days, parent-child sports meetings, and parent-child outings. Overall, the collaboration between homes and kindergartens is primarily a perfunctory practice that yields minimal educational benefits. In particular, the partnership between these entities seldom delves deeply into the intricacies of kindergarten education, and their collaboration lacks the necessary proximity and synchronization. Home-kindergarten activities are infrequently associated with familial education, yielding limited consequential outcomes (Zhou, 2005). Kindergartens have not yet fully enhanced the substance of joint home-kindergarten education. They should enhance parents’ cooperative mindset in joint home-kindergarten education, foster active parental involvement, and enhance parents’ scientific parenting skills as well as early childhood teachers’ guidance abilities to establish a favorable activity environment that promotes comprehensive development in children.

3.2.3. The Dilemma Facing Joint Home-Kindergarten Education

The theme cluster pertaining to the predicament encountered in joint home-kindergarten education is “#6 problems”. As indicated in **Table 2**, the primary keywords within this cluster encompass “quality of child-care”, “rural areas”, and “integration of child-care and education”. The central quandary confronting the integration of home and kindergarten education lies in the divergent perspectives held by parents and teachers. Concerning the responsibility for implementing joint home-kindergarten education, parents contend that early childhood education falls within the purview of kindergartens. Conversely, kindergartens assert that family education should serve as the foundation for kindergarten education, necessitating parental involvement. Moreover, parents prioritize the acquisition of knowledge and skills by their children, while early childhood educators emphasize the enhancement of children’s capabilities and the cultivation of their interests. These contrasting interpretations of educational

tasks have resulted in a disorientation within the field of early childhood education. Secondly, there exists an ambiguity regarding the delineation of responsibility for implementing joint home-kindergarten education. In terms of educational content, the boundaries between the contents that kindergartens and families should undertake respectively are unclear and there is an ambiguity regarding the areas for cooperation. As a result, early childhood teachers who demand that parents participate in kindergarten education overlook parents' perspectives, and parents adopt a negative attitude towards cooperation, doing whatever they are asked to do without critical reflection. The precise delineation of the content and form of joint home-kindergarten education lacks clarity. As a result, parents' meetings, home-kindergarten communication, and parents and teachers are encompassed as integral components of joint home-kindergarten education, rendering joint home-kindergarten education a mere formality. The persistent predicament of parents primarily prioritizing the substance of familial education and child rearing remains unresolved. The facilitation of joint home-kindergarten education and its substantial progress necessitate a consensus between parents and kindergartens, as well as the establishment of clear boundaries for this collaborative educational approach.

3.2.4. The Strategy for Joint Home-Kindergarten Education

Based on the data presented in **Figure 3** and **Table 2**, it is evident that the cluster labeled as “# 8 communication” comprises main keywords such as “early childhood teachers”, “empathy”, “home-kindergarten communication”, and “habit formation”. In joint home-kindergarten education, kindergartens encourage parental participation in early childhood education. This entails fostering a cooperative relationship with parents, employing diverse channels and methods of communication, and jointly delivering educational content to children to enhance the development of kindergarten education and elevate the overall quality of early childhood education (Zheng & Zhu, 2023). Home-kindergarten interaction in kindergartens is facilitated through various means, including parents' meetings, open days, exchanges, telephone interviews, home visits (Zhang, 2022), special lectures, parents' classes, parents' salons, and parent-child activities. However, there is a lack of emphasis on the development and implementation of effective strategies for joint home-kindergarten education. Different strategies necessitate different applicable conditions, and a plethora of strategies can synergistically enhance the profound advancement of joint home-kindergarten education. Presently, scholars accentuate the multiplicity of joint home-kindergarten education forms in their research, yet they frequently overlook parents' demands and fail to discern shared issues among children in the same cohort (Ye, 2008). Consequently, the strategies and forms of joint home-kindergarten education take precedence over the substance, rendering joint home-kindergarten education inoperable. In order to establish and foster positive relationships between homes and kindergartens within the context of joint home-kindergarten education, it is imperative to integrate the study of strategies for such collabora-

tion with an understanding of its objectives, content, and applicable circumstances and ensure the harmonization of both the form and substance of this approach.

3.3. Research Frontiers

A keyword timeline is a tool that effectively illustrates the temporal progression, evolutionary trajectory, and contextual significance of the main keywords within a given cluster and provides insightful visualizations that shed light on the prevailing research trends within a particular field (Li, 2007). This study employed the CiteSpace software to construct a comprehensive timeline of key research keywords pertaining to joint home-kindergarten education in China, spanning from 1998 to 2022 (see Figure 4). Further analysis of the existing literature pertaining to joint home-kindergarten education in China reveals that the research in this field has progressed through two distinct phases.

The initial phase, which encompassed the years 1999 to 2008, constituted a period characterized by the preliminary investigation of cooperative strategies and methodologies as its central theme. As is shown in Table 2, the main keywords pertaining to “kindergarten education” are “home-kindergarten cooperation” and “family education”. In 1999, Yang Manfang highlighted the significance of joint home-kindergarten education as an emerging field, emphasizing the need for further exploration of diverse approaches to kindergarten operation (Zhang & Tan, 2022). Subsequently, an increasing number of scholars began to embrace the study of joint home-kindergarten education, investigate novel models and methods, and propose various cooperative strategies and approaches including the “interactive” home tutoring model (Yang, 1999), parent-child activities,

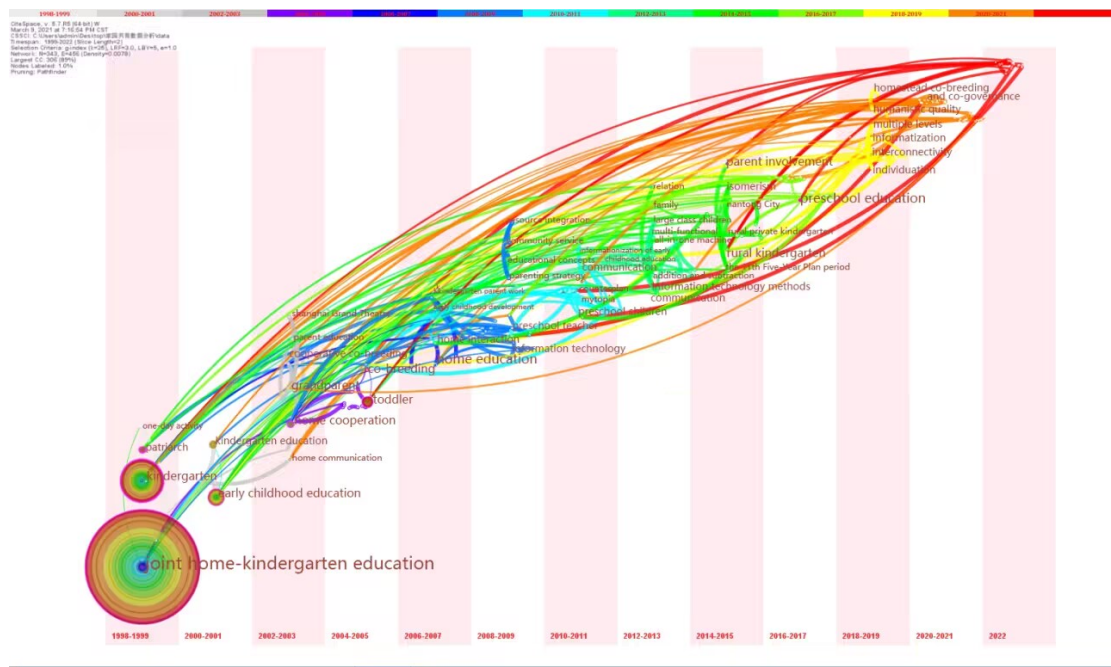


Figure 4. Diagram of keyword co-occurrence time zones in research on joint home-kindergarten education.

“parents’ schools”, “parents’ seminars”, “regular home visits”, and “parental involvement in teaching” (Xie, 2005). Currently, the focal point of scholarly inquiry lies in the realm of collaborative efforts between homes and kindergartens in the context of joint home-kindergarten education. Extensive scholarly investigations have yielded notable findings in this domain.

The second phase, spanning from 2009 to 2015, constituted a period characterized by the integration of educational concepts and resources aimed at fostering children’s development. During this phase of research, a more comprehensive investigation was conducted, focusing on the exploration of “educational concepts”, “resource integration”, “informationization of early childhood education”, “communication”, and “information technology methods”. These terms emerged as prevalent keywords within the academic discourse. Starting in 2009, research on joint home-kindergarten education expanded from strategies and techniques to encompass wider-ranging educational concepts, community services, and resource integration. “Kindergartens ought to draw upon diverse community resources to establish an early childhood education network wherein kindergartens serve as the nucleus and interior and exterior forces collaborate to foster sophisticated, scientific, and efficacious early childhood education concepts” (Bai, 2003). Alongside theoretical inquiries, a number of studies have commenced integrating information technology into home-kindergarten communication. The establishment and functioning of online joint home-kindergarten education ecosystems (Song, 2009), in the “Internet plus” era, have emerged as a fresh research area from an information technology perspective. “The utilization of Internet and mobile communication technology in the development of a home-kindergarten information sharing platform not only enhances the timeliness and convenience of communication between home and kindergarten, but also significantly broadens and diversifies the scope of joint home-kindergarten education. This platform liberates joint home-kindergarten education activities from the constraints of conventional practices, facilitating the implementation of personalized and multi-level activities” (Pei & Zhu, 2022). Moreover, it effectively addresses the information requirements of kindergartens, teachers, and parents, thereby fundamentally transforming the prevailing unidirectional parent-teacher communication through the establishment of this platform, a powerful synergy is generated, adigm during parental meetings (Xu, 2018). Throffostering the holistic and sound development of children. Furthermore, it is imperative to intensify the endeavor of constructing research teams, capitalizing on the benefits of academic institutions and professional organizations affiliated with tertiary education, augmenting collaboration with practitioners in early childhood education, and fostering interconnectedness between pedagogy, scholarship, and inquiry. Such measures are crucial to attain a robust symbiosis between theoretical and practical domains in the investigation of joint home-kindergarten education.

4. Conclusion

This study conducted a comprehensive visual analysis of 428 pertinent articles

on joint home-kindergarten education sourced from the CNKI database, spanning the years 1998 to 2022. The analysis was performed using the CiteSpace software. Through the exploration of various dimensions such as the annual number of articles published, co-occurrence of authors and institutions, co-occurrence of keywords, keyword clustering, and keyword co-occurrence time zones, it became evident that Chinese scholars have made remarkable strides in research on joint home-kindergarten education. However, there is still much room for improvement in the research on joint home-kindergarten education when it comes to the gap between research on global characteristics and that on other areas of early childhood education.

In terms of temporal distribution, there has been a steady rise in the quantity of articles on joint home-kindergarten education in recent years. The most recent governmental policies concerning early childhood education have delineated the path for research into joint home-kindergarten education.

In terms of spatial distribution, the collaborative cohesion between research institutions and individuals is weak. Institutions and individuals engaged in the study of joint home-kindergarten education have been unsuccessful in establishing robust academic teams and collaborative networks. And there is a lack of core researchers who can assume leadership roles. The absence of a specific and universally recognized core theory has resulted in ambiguous boundaries in the study of joint home-kindergarten education. This is one of the primary reasons for the lack of cohesion in such research. In the future, universities, kindergartens, and research institutes should enhance their collaborative efforts. They should also advance the practical application and development of theoretical knowledge in order to more effectively support research in the area of joint home-kindergarten education.

The quantity of research findings is inadequate in terms of productivity. The aim of joint home-kindergarten education is to establish a shared understanding between parents and kindergartens on early childhood education, promote mutual understanding and cooperation, and effectively utilize resources from both home and kindergarten to emphatically foster the development of young children. On a practical level, however, the predominant role in joint home-kindergarten education is often assumed by early childhood educators, with parents merely playing a passive cooperative role. This approach fails to establish a robust cooperative educational relationship and atmosphere, thereby diminishing the ideal impact anticipated from the implementation of joint home-kindergarten education. Advancing research in joint home-kindergarten education and elucidating the fundamental concepts and capabilities of this system can stimulate the execution of this educational approach. This can significantly foster the further development of early childhood education.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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