

# Research Landscape of Career Planning and Employment Guidance Education: A Bibliometric Analysis of Chinese Literature

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## Abstract

A bibliometric analysis of the literature on career planning and employment guidance in the Chinese higher education context was conducted using 452 records from the Lens database. Visualisation tools such as Biblioshiny in RStudio, VOS Viewer, and Lens were employed. The analysis revealed that career adaptability and career maturity are the most well-researched themes, whereas career development, self-efficacy, and career construction are underexplored. The most cited article is the Effects of Perceived Overqualification on Career Distress and Career Planning by Ma et al. (2020), with 73 citations. Co-occurrence network analysis identified the most commonly studied and interrelated concepts. While the fields of medicine, nursing, and healthcare have been extensively studied, this underscores the pressing need to broaden the research focus to include Social Sciences and other disciplines. Scholars Wang Y and Li Y emerged as the most impactful based on publication count and h-index. Notably, 2023 saw a peak in publications on this topic in China, with numbers still growing. Future research could focus on these underexplored themes and disciplines to provide a deeper understanding of career planning and employment guidance education in Chinese universities.

## Keywords

Career Planning, Employment Guidance, Bibliometric Analysis, H-Index, China, Higher Education

## 1. Introduction

Employment guidance and career planning education have been integral parts of the Chinese higher education landscape for many years. Initially, theories of ca-

reer guidance and counselling in China were mainly adopted from Europe and the United States, particularly since 1990 (Sun & Yuen, 2012). Tsinghua University in China initiated its efforts in this domain as early as 1916, with the establishment of a vocational guidance committee in 1923. University efforts have primarily focused on providing employment guidance and career development lectures to students (Jin, 2017). In response to the country's rapid development, demand for career guidance has increased substantially. Consequently, new policies have been formulated and executed at the national level, accompanied by an increase in the availability of career-related training courses for students in higher education institutions (Zhou et al., 2016).

Over the years, many career guidance centres have been set up in universities, accumulating useful experiences in the implementation of career guidance and counselling. In the Chinese educational context, the terms *zhiye guihua* (career planning) or *jiuye zhidao* (employment guidance) are used when referring to career guidance, career education, and vocational guidance (Doncel-Abad & Mendes, 2024; Kim et al., 2017).

Furthermore, bibliometric analyses have been conducted in the domains of career planning and employment guidance education within the Chinese context. For example, Pham et al. (2024) presented a detailed analysis of career guidance in China. However, the scope of this analysis was limited to schools. Specifically, there is a lack of comprehensive attention to the breadth of the research topic, resulting in incomplete research content and an imbalance in the focus on various concepts within the domain (Yang & Yuan, 2021). This indicates the need for a more thorough and nuanced exploration of the field to provide a deeper understanding of career planning and employment guidance education in the higher education context in China.

To address these limitations, this study conducted a bibliometric analysis of the research landscape in career planning and employment guidance education in the Chinese higher education context over the past decade, from 2014 to 2024. This study seeks to fill this research gap by thoroughly examining the scope and depth of the existing studies. The analysis focused on exploring patterns, trends, and shifts in research, thereby offering an overview of the evolution and current state of the field. The research questions addressed in this study were designed to systematically explore these dimensions, ultimately contributing to a deeper understanding of career planning and employment guidance education in the Chinese context. Accordingly, the following research questions (RQs) are addressed in this paper:

- What insights can be gained from thematic map analysis regarding the field's evolution?
- What are the most frequently cited academic articles?
- What does co-occurrence network analysis reveal about prevalent concepts and research in the field?
- Which authors have the most significant impact in the field?

- What patterns can be observed in the number of academic publications between 2014 and 2024?

## 2. Literature Review

Career guidance in China has evolved through distinct stages, from government-mandated job allocation to vocational guidance and the current focus on career counselling in secondary schools and universities (Wang & Wei, 1998; Zhou et al., 2016). This landscape has been shaped by various socio-economic and educational reforms over recent decades.

The traditional career guidance model in Chinese universities is seen as too uniform and needs to be personalised to better meet the needs of students and the market economy (Sun & Yuen, 2012). Innovative approaches have been explored to integrate models that combine career planning and employment guidance courses to enhance students' professional expertise and capabilities (Liu & Ma, 2022).

Recent studies have highlighted the critical role of career planning in enhancing students' career readiness and employment outcomes. For instance, research by Ma et al. (2020) on the effects of perceived overqualification underscores the importance of career planning in mitigating career distress and fostering career identity among students. Similarly, the impact of COVID-19 on career planning has received significant scholarly attention. Studies published in 2021, such as those by Chen and Zeng (2021), have explored how the pandemic has exacerbated anxiety among students, thereby influencing their career planning processes. These findings suggest that universities need to incorporate mental health support into their career guidance frameworks to address the holistic needs of students at unprecedented times.

Moreover, the sector-specific focus on the medical, nursing, and healthcare fields in Chinese universities indicates a nuanced approach to career planning education. Research has shown that students in these fields face unique challenges and stressors, such as high levels of occupational stress and burnout, which can impact their professional identity and career trajectories. For example, studies by Zhang et al. (2021) have emphasised the importance of structured career planning and professional identity development in nursing education. This focus on specialised career guidance programs highlights the need for tailored approaches that consider the specific demands and expectations of different professional fields. As such, future research and policy initiatives should aim to expand these specialised programs across other disciplines, ensuring that all students receive comprehensive support tailored to their career aspirations and evolving job market.

Moreover, there are significant disparities in the quality and level of career guidance courses across universities, which are influenced by the quality of students, curriculum systems, and teacher expertise (Penggang & Qian, 2018). Scholars have also pointed out that traditional employment guidance methods are insufficient to meet the evolving needs of enterprises and students, necessitating a

shift to more consistent and comprehensive career counselling systems (Huang & Zhao, 2022). Most importantly, strengthening career planning education is essential for enhancing the employment competitiveness of college students and supporting the reform of the personnel training system (Liu, 2012).

In summary, literature reviews on career planning and employment guidance education in China reveal a dynamic and evolving field. The historical progression from job allocation to comprehensive career counselling reflects broader economic and educational reforms. Current models emphasise the need for personalised guidance, addressing disparities in quality and effectiveness across institutions. Innovative approaches and systematic frameworks are being developed to prepare students for the job market, highlighting the importance of continuous improvement and adaptation in career guidance practices.

### 3. Method

This section outlines the methodology employed in the bibliometric analysis. Data was sourced from the Lens database, with the specific search query, keywords, and additional filters detailed in Table 1.

**Table 1.** Search query.

Criteria	Description
Keywords	("career planning" OR "employment guidance") AND ("higher education" OR "university" OR "tertiary education")
Period	2014-2024
Language	English
Country	China
Type	Peer-reviewed Articles
No. of Articles	452

Table 1 presents the search parameters employed to extract data from the Lens database. The keywords "career planning" and "employment guidance" were used to identify relevant articles published between 2014 and 2024. This period was chosen to emphasise recent developments in the field. Existing studies by Yang and Yuan (2021) have covered earlier decades; hence, the same were excluded from this analysis. The initial dataset, based on these parameters, yielded 16,967 records. The search was further refined to include only English-language articles to ensure a uniform dataset and facilitate a broader international scholarly discussion. This decision was made to enhance comparability with existing bibliometric studies, which predominantly analyze English-language research. Additionally, English is widely used in academic databases, increasing the accessibility of findings for a global audience. While this approach may exclude insights from Chinese-language publications, it allows for a more standardized analysis of trends and influences in career planning and employment guidance research. This re-

sulted in a dataset of 1450 records. Finally, articles focusing exclusively on research conducted in China and higher education context, resulted in a final dataset of 452 bibliometric records.

The extracted dataset was exported to an Excel sheet for preliminary checks to ensure completeness and accuracy. This step involved verifying that the dataset included all essential bibliographic information, such as author names, publication dates, journal sources, and keywords. These attributes are critical, as they form the basis for subsequent analyses, including identifying high-frequency keywords, mapping research trends, and examining authorship and citation patterns. This helped ensure the reliability and validity of the analysis, providing a foundation for analysing the research landscape of career planning and employment guidance education in China.

Finally, advanced visualisation tools, specifically RStudio and VOS Viewer, were utilised to analyse the data and address the research questions. Biblioshiny, a visualisation software integrated within RStudio and developed by [Aria and Cuccurullo \(2017\)](#), was employed for science mapping and performance analysis, providing tools to explore and visualise the bibliometric landscape. Additionally, the VOS Viewer, created by [Van Eck and Waltman \(2023\)](#), was used for supplementary analysis, offering detailed network visualisations to examine relationships and trends within the data. Lastly, the Lens Analysis tool was used to extract relevant data files to answer different research questions.

**Table 2** provides an overview of the research questions and specifies the corresponding tools applied to answer each, ensuring a methodical approach to the analysis.

**Table 2.** Research questions and corresponding analytical tools.

RQs	Tools
RQ1: What insights can be gained from thematic map analysis regarding the field's evolution?	Biblioshiny in RStudio
RQ2: Which are the most frequently cited academic articles?	Lens Analysis Tool and Excel
RQ3: What does co-occurrence network analysis reveal about prevalent concepts in the field?	VOS Viewer
RQ4: Which authors have the most significant impact in the field	Biblioshiny and Excel
RQ5: What patterns can be observed in the number of academic publications between 2014 and 2024?	

**Table 2** outlines the research questions and specific analytical tools used to address them. Biblioshiny in RStudio and VOS Viewer was employed to provide insights into the field's thematic evolution, citation patterns, co-occurrence network, author impact, and publication trends.

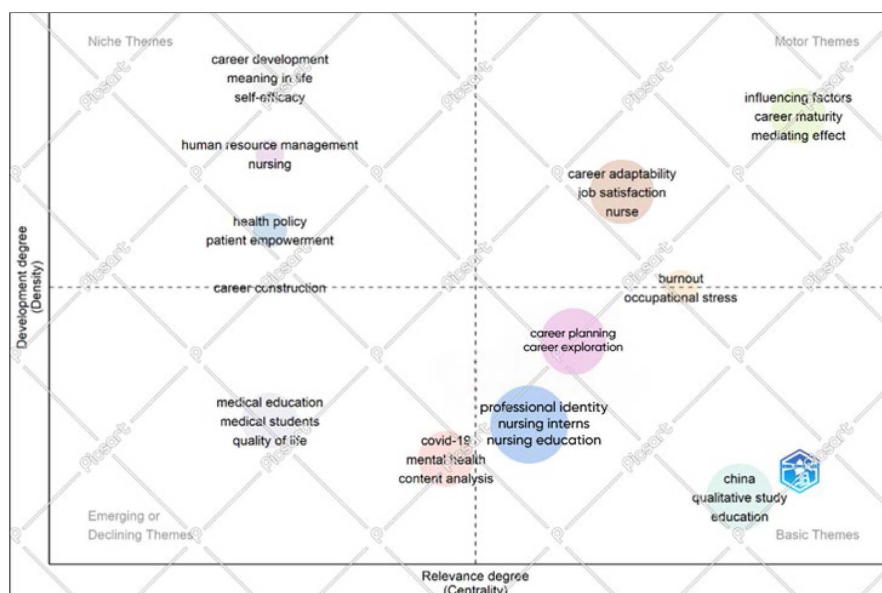
## 4. Results

This section addresses all the research questions posed earlier.

### 4.1. Thematic Map Analysis

This section addresses RQ1: What insights can be gained from thematic map analysis regarding the field's evolution?

To answer this research question, a thematic structure map was generated in Biblioshiny, as presented in **Figure 1**.



**Figure 1.** Thematic map.

**Figure 1** presents the research landscape of career planning and employment guidance education in China.

Niche themes indicate high density but low relevance. This means that many articles related to the themes in this quadrant have been published. However, they are currently not relevant. In this context, “relevance” was determined based on the themes’ centrality within the overall research network, meaning their frequency of co-occurrence with dominant topics and their citation impact within recent literature. Themes categorized as less relevant typically exhibit weaker connections to emerging research trends or policy discussions, despite having a concentrated body of work. Accordingly, as seen in **Figure 1**, themes such as “career development”, “meaning in life”, “self-efficacy”, “health policy”, and “nursing”, among others are present in this quadrant. This indicates that a substantial amount of literature exists on these themes, yet their relevance has diminished over time.

The emerging or declining theme quadrant indicates low density and low relevance. They help track trends in the literature, highlighting which themes are gaining or losing scholarly attention. Accordingly, themes such as “medical education”, “mental health”, “professional identity”, and “nursing education”, among

others, were observed in this quadrant. This indicates potential areas for further investigation or exploration within the academic literature.

On the other hand, the motor theme quadrant indicates high density and relevance. It helps to identify themes and concepts that are highly important and prevalent in this area. Accordingly, themes such as “career adaptability,” “job satisfaction,” and “career maturity” among others can be observed in this quadrant. This indicates that these themes are central and have been widely studied within the field, reflecting their significance and prevalence.

Basic themes quadrant indicates themes with low density, but high relevance. Accordingly, themes such as “career planning”, and “career exploration”, among others, appear in this quadrant, indicating that these themes are highly relevant to the field of career planning and employment guidance education in China; however, few articles have been published during the past decade. This finding suggests potential opportunities for further research and scholarly exploration in these areas.

Finally, some themes were found to intersect between different quadrants, providing nuanced insights into their current status and scholarly attention. For instance, “career construction” is at the intersection of niche and emerging themes, suggesting that it is not presently relevant but may gain traction in the future. “Nursing education” intersects between emerging/declining and basic themes, leaning towards basic, indicating an increasing relevance but less density. “Burn-out” and “occupational stress” are precisely at the intersection of basic and motor themes, denoting high relevance and density, indicating sustained scholarly interest in these areas. These intersections highlight the dynamic nature of research themes and their evolving importance within the academic discourse on career planning and employment guidance education in China.

## 4.2. Most Cited Articles

This section addresses RQ2: What are the most frequently cited academic articles?

To answer this research question, the Lens analysis tool was used to extract the relevant data. The same was exported to Excel to create a corresponding chart.

**Table 3.** Top 10 most cited scholarly works (2014-2024).

Title	Code	Year	Citation Count	Author(s)
Effects of perceived overqualification on career distress and career planning: Mediating role of career identity and moderating role of leader humility	A1	2020	73	Chao Ma; Deshani B. Ganegoda; Zhen Xiong Chen; Xinhui Jiang; Chunyan Dong
Influences of nursing students' career planning, internship experience, and other factors on professional identity.	A2	2021	63	Li-zhen Wei; Shi-shuang Zhou; Shuang Hu; Zhan Zhou; Jia Chen



## Continued

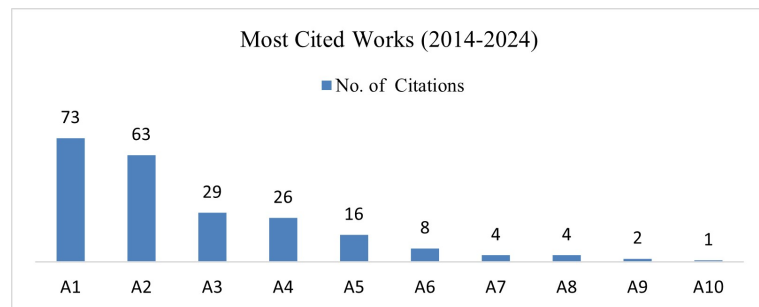
The Relationship Between Intolerance of Uncertainty and Employment Anxiety of Graduates During COVID-19: The Moderating Role of Career Planning.	A3	2021	29	Li Chen; Shuyu Zeng
The effects of patients initiated aggression on Chinese medical students' career planning.	A4	2017	26	Zhonghui Xie; Jing Li; Yuhua Chen; Kaijun Cui
Effects of the COVID-19 pandemic on acute stress disorder and career planning among healthcare students.	A5	2021	16	Luping Zhang; Hongbo Qi; Longqiong Wang; Fulan Wang; Jin Huang; Feifei Li; Zhiwei Zhang
Do I decide my career? Linking career stress, career exploration, and future work self to career planning or indecision.	A6	2022	8	Zemei Zhang; Xuan Yu; Xuhong Liu
Evaluation of career planning group counseling and its effectiveness for intern male nursing students.	A7	2023	4	Wen-Yao Xie; Xiao-Li Yang; Yi-Min Cai; Wei Mo; Zhou-Min Shen; Yu-Hui Li; Bi-Fang Zhou; Yu-Lian Li
Study on the Relative Model of Engineering Enterprise Career Planning.	A8	2023	4	Yan Zheng Guo
Employment intention and career planning of male nursing students in different levels of colleges and universities: A qualitative study.	A9	2023	2	Xiaoting Zeng; Fuxun Yang; Xinyi Xu; Tingting He; Shan Huang; Xiaoxiu Luo; Lihua Min
The Attitude of the Medical Students in Professional Identity and Career Planning in China During COVID-19: A Cross-Sectional Survey.	A10	2021	1	Ming Wen; Xiao-Juan Peng; Jianmin Huang; Huan-Li Li; Ling-Ge Wei; Jianling Cui; Mingxi Zhang; Sha Li; Peng Xie

**Table 3** presents the top 10 most cited scholarly works from 2014 to 2024, including titles, codes, years, number of citations, and author names. Codes were specifically assigned for ease of presentation in the corresponding charts representing the data.

Accordingly, the most cited work is “Effects of perceived overqualification on career distress and career planning” by [Ma et al. \(2020\)](#) with 73 citations, indicating noteworthy influence in the field. Most of these top-cited studies were published between 2020 and 2023, suggesting a recent surge in interest. COVID-19’s impact on career planning is a recurring theme that reflects the pandemic’s relevance in this context. Works from 2021 dominate the list, with four major publications by [Wei et al. \(2021\)](#), [Zhang et al. \(2021\)](#), [Chen and Zeng \(2021\)](#), and [Wen et al. \(2021\)](#), highlighting a peak in scholarly attention during this period. Lastly, most articles focus on students from medical ([Wen et al., 2021](#); [Xie et al., 2017](#)), nursing ([Wei et al., 2021](#); [Xie et al., 2023](#); [Zeng et al., 2023](#)), and healthcare fields



(Zhang et al., 2021) in general. This highlights a strong scholarly interest in understanding the career planning factors within these sectors.



**Figure 2.** Top 10 most cited scholarly works (2014-2024).

**Figure 2** presents the top 10 most cited articles in the field of career planning and employment guidance in the Chinese education context, during 2014-2024, with bars representing the citation count, highlighting the most influential research in the period.

The chart reveals that work A1, that is, Effects of perceived overqualification on career distress and career planning: Mediating role of career identity and moderating role of leader humility (Ma et al., 2020), is the most cited, with 73 citations, indicating its significant impact, while A10, that is, The Attitude of the Medical Students in Professional Identity and Career Planning in China During COVID-19: A Cross-Sectional Survey (Wen et al., 2021), has the least influence, with only one citation. This visualisation helps identify key contributions and contributors to the field.

### 4.3. Co-Occurrence Network Analysis

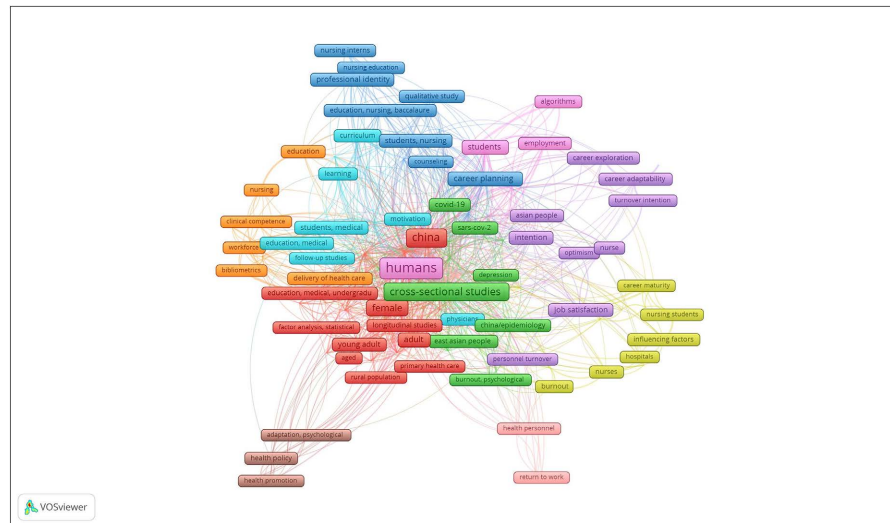
This section addresses RQ3: What does co-occurrence network analysis reveal about the prevalent concepts and research in the field?

To answer this RQ, VOS Viewer was used to generate network visualisations to analyze and interpret research interests in the field of career planning and employment guidance in the Chinese education context.

**Figure 3** presents a co-occurrence network visualisation based on keywords in the literature. This is a graphical representation of the relationships between terms within the dataset. The lines connecting the nodes signify co-occurrence links. This provides insights into key research areas and potential areas of research activity (Van Eck & Waltman, 2023).

As depicted in **Figure 3**, there are 10 clusters, each representing a network of interconnected concepts, with a minimum of five interconnected terms per cluster. **Table 4** highlights the top five clusters based on the highest number of terms and provides insights into their implications.

**Table 4** presents the key clusters identified through co-occurrence keyword analysis, highlighting prevalent concepts in the context of career planning and employment guidance in Chinese education.



**Figure 3.** Co-occurrence network visualisation.

**Table 4.** Co-occurrence keyword interpretation.

Cluster	No. of Items	Key Concepts	Interpretation
Cluster 1 (Red)	20	Adult, adolescent, young adult, aged, socio-economic factors, and rural studies.	This cluster indicates that career planning and employment guidance in Chinese education have addressed diverse age groups and socio-economic factors, particularly focusing on rural areas.
Cluster 2 (Green)	15	Anxiety, depression, COVID-19, occupational stress, burnout.	This cluster highlights the impact of mental health issues, such as anxiety, depression, and burnout, caused by COVID-19 and occupational stress.
Cluster 3 (Blue)	14	Career planning, professional identity, counselling, nursing education.	This cluster centres on structured career planning and the development of professional identity, particularly in the context of counselling and nursing education. It emphasises institutional support mechanisms, such as career counseling services and specialised educational programs, to guide students in their career planning process.
Cluster 4 (Yellow)	13	Career development, career maturity, self-efficacy.	It highlights the importance of fostering career development, career maturity, and self-efficacy. Effective career planning in Chinese education have focussed on building these attributes to prepare students for successful career paths.
Cluster 5 (Purple)	12	Career exploration, career adaptability, career construction, and job satisfaction.	Existing studies have investigated the processes through which individuals explore career options, adapt to changes, construct their career paths, and achieve job satisfaction. It highlights the importance of equipping students with the skills to navigate their career paths independently, fostering adaptability, and enhancing job satisfaction through personal development.

In summary, cluster 1 (Red) indicates a comprehensive approach in Chinese education, addressing diverse age groups and socio-economic factors, particularly focusing on rural areas. Cluster 2 (Green) highlights the pressing issue of mental health, emphasising the impact of anxiety, depression, and burnout exacerbated by COVID-19 and occupational stress. Cluster 3 (Blue) centres on structured career planning and professional identity development, underscoring the importance of institutional support mechanisms, especially in counselling and nursing education. Cluster 4 (Yellow) emphasises the significance of fostering career development, maturity, and self-efficacy, suggesting a focus on building essential attributes for successful career paths among students. Lastly, cluster 5 (Purple) explores the processes of career exploration, adaptability, construction, and job satisfaction, underlining the necessity of equipping students with skills for independent career navigation and personal development.

#### 4.4. Author Impact

This section addresses RQ5: Which authors have the most significant impact on the field?

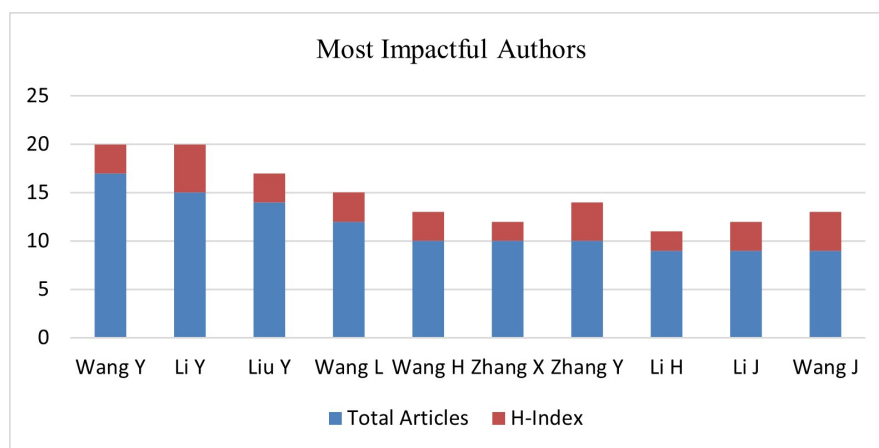
To answer this question, publication and citation data were retrieved from Biblioshiny in RStudio. The articles published by different scholars in the field during 2014-2024 were taken into account, along with the corresponding h-index values. The h-index measures an author's productivity and citation impact by quantifying the number of publications and citations those publications receive. Hence, the h-index was employed as an essential metric for identifying the most impactful authors in the field.

**Table 5.** Author publications and H-Index (2014-2024).

Author	14	15	16	17	18	19	20	21	22	23	24	N	H-Index
Wang Y	1	0	1	0	0	2	0	1	2	6	4	17	3
Li Y	0	0	1	0	0	1	2	2	1	6	2	15	5
Liu Y	0	0	2	1	1	2	2	2	1	2	1	14	3
Wang L	1	1	0	0	0	0	1	1	1	3	4	12	3
Wang H	0	0	1	0	1	0	0	0	1	4	3	10	3
Zhang X	1	0	2	0	0	1	0	1	0	3	2	10	2
Zhang Y	0	0	0	0	0	2	1	2	3	1	1	10	4
Li H	1	0	0	0	0	1	0	0	2	4	1	9	2
Li J	0	0	0	1	0	0	0	0	1	4	3	9	3
Wang J	1	0	0	0	1	0	0	0	2	5	0	9	4

Note: N is No. of Articles. 14 - 24 indicate years 2014-2024.

**Table 5** presents the number of publications and h-index values for various authors from 2014 to 2024, showing their research productivity and impact over time.



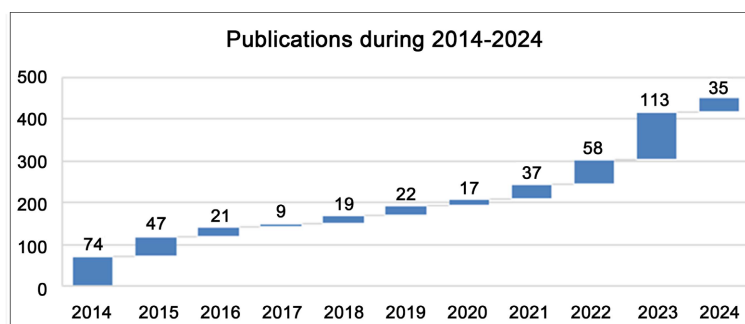
**Figure 4.** Most impactful authors.

**Figure 4** compares the total number of articles and the H-index of various authors, highlighting their productivity and scholarly impact in their fields. The blue bars represent the total number of articles published, whereas the red bars indicate the authors' H-index, providing a clear visual distinction between output and influence.

Furthermore, as seen in **Table 5**, Wang Y published the highest number of articles (17) in the field of career planning in China but showed a relatively low h-index (3), indicating that while prolific, their impact per publication was moderate. Furthermore, Li Y, with 15 articles and the highest h-index of 5, had the greatest impact in the field, demonstrating both productivity and high citation impact per article. This suggests that Li Y's work is more frequently cited and influential than the others in this domain. Similarly, other authors such as Zhang Y and Wang J also demonstrated high h-index values, indicating their impact in the field.

#### 4.5. Publication Trends

This section addresses RQ6: What patterns can be observed in the number of academic publications between 2014 and 2024?



**Figure 5.** Publication frequency (2014-2024).

**Figure 5** presents the annual number of publications in the field of career planning and employment guidance in the Chinese education context. The graph re-

veals a general upward trend in the total publications in this field, with a particularly substantial increase in 2023.

It can be observed that there is a notable surge in total publications beginning in 2021 and peaking in 2023. This peak reflects a growing interest in research in the field of career planning and employment guidance in China. While there was an apparent decline in scholarly publications from 2014 to 2020, a consistent upward trend emerged starting in 2021. This trend indicates a renewed and increasing focus in this field, suggesting an overall positive trajectory in scholarly output during the latter part of the decade.

## 5. Discussions and Conclusion

This section discusses the results and presents conclusions and recommendations derived from the bibliometric analysis.

The analysis of thematic quadrants revealed a dynamic landscape of research themes within the fields of career planning and employment guidance in Chinese education. Niche themes, such as career development and self-efficacy, despite their high density, have lost relevance over time, suggesting a shift in scholarly focus. Emerging themes, such as mental health and professional identity, while currently of low density and relevance, represent potential areas for future exploration. Motor themes such as career adaptability, job satisfaction, and career maturity, characterised by high density and relevance, reflect the core areas of study and are indicative of the field's current focus. Despite their high relevance, basic themes, such as career planning and career exploration, are underrepresented in the literature, indicating potential opportunities for further research. The intersection of themes across quadrants underscores their evolving nature, highlighting the fluidity of scholarly discourse and the need for continuous monitoring of trends to stay up-to-date on developments in the field.

The analysis of the most-cited works from 2014 to 2024 highlights significant trends and influential research on career planning and employment guidance within the Chinese education context. While citation counts indicate broader recognition, they do not always equate to innovation or impact. Some articles may gain widespread citations due to their accessibility, methodological approach, or alignment with prevailing research agendas rather than groundbreaking contributions. Notably, [Ma et al.'s \(2020\)](#) study on perceived overqualification underscores the critical impact of this research area, reflecting both its academic relevance and practical significance in shaping career guidance strategies. To gain a more nuanced understanding of scholarly influence, future research could incorporate alternative impact metrics, such as citation bursts, expert evaluations, or qualitative assessments of research significance. The prevalence of studies published in 2021, particularly those focusing on COVID-19's effects, points to a heightened scholarly interest in recent years. Additionally, the emphasis on students in the medical, nursing, and healthcare fields suggests a sector-specific concern, indicating a need for other domains to be explored.

Co-occurrence network analysis revealed key focus areas in Chinese education, emphasising comprehensive rural education, mental health, structured career planning, career development, and career exploration. These findings underscore the importance of institutional support, particularly in mental health and career guidance, and the need to foster essential career skills among students. Educational strategies and support mechanisms should be employed to equip students with future career paths.

Research scholar Wang Y emerged as one of the authors with the most publications during the past decade. However, a relatively low h-index suggests a moderate impact per publication. In contrast, despite having fewer articles, Li Y exhibited the highest h-index, indicating a significant influence in the field. This underscores the importance of not only productivity but also citation impact in assessing an author's contribution. Other authors, such as Zhang Y and Wang J, with high h-index values, further demonstrated the diverse range of impactful contributors in this domain.

Finally, a significant upward trend in the annual number of publications in the field of career planning and employment guidance in the Chinese education context, particularly from 2021 onwards, was observed. The substantial increase in 2023 indicates a heightened interest in this field, reflecting the growing importance of career planning and employment guidance in China's educational landscape. Despite the decline in publications from 2014 to 2020, the resurgence from 2021 suggests a renewed focus and commitment to this field. This increase can be attributed to multiple factors. The COVID-19 pandemic significantly disrupted the job market, prompting greater attention to career planning education as universities and policymakers sought to enhance graduates' employability. Additionally, China's evolving higher education policies, particularly the emphasis on employability-driven curriculum reforms, have spurred academic interest. The expansion of digital learning resources and career guidance platforms has also contributed to the renewed scholarly engagement with this topic. This trend underscores the evolving nature of scholarly discourse in this area and points toward a promising trajectory of increased research output in the coming years.

The recent surge in research interest reflects the growing importance of this field, indicating a promising trajectory for impactful scholarly contributions in the coming years. Future research could prioritise emerging themes such as mental health and professional identity to address evolving challenges in career planning and employment guidance education in China. Additionally, underexplored areas such as career planning strategies, career exploration, and long-term career adaptability require further investigation. In particular, research on personalized career planning approaches tailored to diverse student backgrounds, the role of digital platforms in career decision-making, and the effectiveness of early career interventions remains limited. Similarly, while career exploration is a well-established concept, there is a need for deeper analysis of how socio-economic factors, parental influence, and institutional support shape students' career exploration

behaviors. Furthermore, studies on long-term career adaptability often focus on initial career transitions, but little is known about how graduates continuously adapt to labor market shifts, technological disruptions, and career mobility over time. Addressing these gaps can provide a more comprehensive understanding of career development and improve career education strategies in China. To address these gaps, interdisciplinary collaborations integrating psychology, sociology, and labor economics could provide a more holistic understanding of career development.

Furthermore, expanding methodological approaches—such as longitudinal studies and mixed-methods research—could yield deeper insights into the long-term impact of career guidance initiatives. Policymakers and institutions should actively support these research directions by funding targeted studies, incorporating career development modules into general education curricula, and strengthening university-industry partnerships to bridge the gap between academic training and employment outcomes.

## 6. Limitations

The study acknowledges several limitations. First, the bibliometric dataset was exclusively extracted from the Lens database, omitting other databases such as Scopus, Web of Science (WoS), and Dimensions, which might provide a broader scope of literature. Second, the study focused solely on literature from China, excluding global research to maintain a specific focus on the Chinese higher education context. Additionally, the dataset was confined to a decade-long timeline from 2014 to 2024, excluding studies before 2014 to concentrate on recent trends and developments. Moreover, the analysis was limited to certain bibliometric attributes. Future research could expand this by incorporating analyses such as Bradford's Law, Lotka's law, three-field plots, and co-authorship networks, among other metrics, to gain a deeper understanding of the field. Finally, the study utilised specific visualisation tools aligned with the research objectives; however, future studies could benefit from employing a broader range of tools and software, such as CiteSpace, Gephi, and BibExcel, to enhance the analysis and visualisation of bibliometric data.

## Conflicts of Interest

The authors have no conflicts of interest to declare.

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