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Using Baidu Index to Explore the Public Online Interest in Ethics for Teachers

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Abstract

Objective: This study aims to assess the public's attention to "ethics for teachers" during the process of building ethics for teachers in China and to explore its temporal and spatial evolution characteristics and potential influencing factors, with the goal of providing reliable support for enhancing the level of ethics for teachers in the education sector. **Methods:** This research utilizes trend analysis, demand distribution, and demographic profiling based on Baidu Index to analyze the public's attention to "ethics for teachers" from November 17, 2011, to November 17, 2024. **Results:** The public's attention to "ethics for teachers" exhibits a regular pattern of change. In terms of time, the Baidu Index showed little variation from 2011 to 2016, maintaining a stable level; however, a significant increase began after 2017, with noticeable declines during winter and summer vacations, and an upward trend observed around Teacher's Day and when the government issued relevant documents on "ethics for teachers." Spatially, the attention to "ethics for teachers" is higher in provinces and cities in the eastern region compared to the slightly lower attention in the central and western regions. In terms of age and gender, individuals aged 20 to 39 constitute the primary audience, with female groups showing higher levels of attention than male groups. Additionally, a comparison of search indices between the keyword "ethics for teachers" and the related term "teachers' ethics and manners" reveals that the public shows greater interest in the latter. **Conclusion:** The potential influencing factors for the public's attention to "ethics for teachers" primarily include the series of relevant documents issued by the state, the implementation of "ethics for teachers" practices by various schools in accordance with their specific contexts, the specific "ethics for teachers" practices of teachers across different age groups, parents' concern for ethics for teachers in their children's schools, the practice of "ethics for teachers" among university students and graduates, as well as activities during winter and summer vacations and Teacher's Day.

Keywords: Baidu Index, Ethics for teachers, Online interest, Search engine, Big data

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1. Introduction

Current academic understanding of ethics for teachers primarily derives from two perspectives. The patriarchal tradition regards moral education as the core objective of education, viewing teachers as authoritative guardians of morality and wisdom, a viewpoint common in traditional or culturally homogeneous societies. In contrast, liberalism posits that

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values are a result of individual choice, suggesting that teachers need only adhere to professional ethics and are not responsible for instilling moral values, a duty that primarily falls to families (Ye and Law, 2019). For China, the construction of teachers' ethics is one of the key tasks in education. Particularly since the onset of the 21st century, in the face of globalization and multicultural challenges (Tu, 2016), the work of ethics for teachers has become a prominent topic in the education sector, garnering increasing attention from all sectors of society. "A strong nation in education must first have strong teachers" (Zhu and Bo, 2023), and ethics for teachers has become the foremost task supporting the realization of the strategic goal of building a strong education system. General Secretary Xi Jinping has emphasized the importance of "strengthening the construction of teachers' ethics and manners, improving the quality of teacher training, and cultivating a high-level teacher workforce for the new era" (Xi, 2024). ethics for teachers is a crucial theme in promoting school development, representing a high degree of unity between a teacher's intrinsic virtues and external norms. It serves as the primary standard for assessing the quality of the teaching workforce and is an essential guarantee for implementing the work of moral education. This not only directly impacts the interests of teachers and students but also concerns the construction of a positive educational ecosystem and the realization of public interests in society. As we enter the 21st century, the rapid development of the economy and society has led to an urgent demand for high-quality talent cultivation, prompting the state to set higher requirements for teacher workforce development. In an era of advanced information technology, ethics for teachers has inevitably become a focal area of public concern. Since November 2011, the country has successively issued a series of policy documents, including the "Code of Ethics for Higher Education Teachers," the "Opinions of the Central Committee of the Communist Party of China and the State Council on Comprehensively Deepening the Reform of the Teacher Team in the New Era," the "Opinions on Strengthening and Improving the Construction of ethics for teachers and manners in the New Era," the "Ten Guidelines for the Professional Conduct of College Teachers in the New Era," the "Notice on Conducting Special Education on ethics for teachers in the Education System," the "Guiding Opinions on Improving the System and Mechanism for the Construction of Ideological and Political Work and ethics for teachers and Manners among College Teachers," and the "Opinions of the Central Committee of the Communist Party of China and the State Council on Promoting the Spirit of Educators and Strengthening the Construction of a High-Quality and Professional Teacher Team in the New Era." These documents provide clear guidance for the education system to learn and practice the requirements of ethics for teachers and for the public to effectively supervise these practices. Firstly, the content of ethics for teachers is a practical necessity for cultivating a high-level teaching workforce. High-quality economic development requires high-quality education as its support, and high-quality education fundamentally relies on a group of high-quality, high-level teaching staff. The cultivation of a high-level teaching workforce is not an overnight process; it requires integrating ethics for teachers as a core competency throughout the entire process of teacher training and development, providing a foundational value for teachers' professional growth. This inevitably draws widespread attention from teacher education training institutions and the relevant stakeholders. Secondly, the work of building ethics for teachers is a key focus and critical point for schools to implement the fundamental task of fostering virtue and nurturing talent. The intrinsic requirement of fostering virtue and nurturing talent is that educators in schools must possess political integrity, social ethics, and personal morality. This necessitates that the governance process in schools prioritize the cultivation of ethics for teachers as a core task, which naturally positions ethics for teachers as a focal concern for teachers and administrators across various educational institutions. Thirdly, the construction of ethics for teachers is an inherent requirement for realizing the vision of educational modernization by 2035. Educational modernization implies that the education sector must undergo reform. The transformation and modernization of education impose higher demands and challenges on teachers. In the face of sudden changes, the educational competition has become characterized by internal competition (Ran, 2024), short-sightedness (Wang and Gao, 2024), and a tendency toward utilitarianism. Meanwhile, the construction of ethics for teachers in schools has misaligned with the expectations of educational reform, and in some cases, has even overstepped boundaries, leading to a collapse of ethics and deviation in teaching behaviors among a minority of teachers (Gu and Cheng, 2019). This has, to some extent, harmed the legitimate interests of stakeholders and has inevitably sparked public debate in the internet age. ethics for teachers affect the interests of the state, society, schools, and families at multiple levels. It not only reflects the personal qualities of teachers but also serves as a crucial guarantee for the quality of education and the educational environment. Therefore, this research is inspired and guided by the above content.

The internet technology characterized by openness, interactivity, and immediacy has profoundly transformed the content production methods in human society (Xie and Shi, 2020). The interconnectedness of the internet has altered the traditional one-dimensional interaction pattern, awakening the public's awareness as "users" and embedding it throughout the content production and dissemination processes across various fields, including economics, healthcare,

sports, tourism, and education. With the evolution of internet technology, particularly the rapid rise of big data technology, there has been significant support for the full application of search engine functionalities, markedly enhancing the convenience, accuracy, and intelligence of information retrieval, as well as enabling more precise identification of the diverse needs of service recipients. Consequently, in recent years, scholars in the humanities and social sciences have gradually begun to leverage massive datasets of internet users' search behaviors, such as Google Trends (Correa, 2021), Bing Index, and Baidu Index, for academic exploration. Currently, researchers primarily focus on analyzing the search behaviors of specific demographic groups within society, such as university students (Liu et al., 2013) and children's information retrieval behaviors (Zhou, 2022). Additionally, some scholars have utilized online search data for predicting tourist traffic in scenic areas (Huang et al., 2017), Consumer Price Index (CPI) forecasting (Zheng et al., 2024), and real estate price predictions (Zhang and Tang, 2016). Other researchers have analyzed online data to study the prevalence of asthma and its influencing factors (Wang et al., 2020), explored the factors affecting health in relation to air pollution (Zhong et al., 2019), and examined the structural characteristics and flow of urban networks (Wang and Zhao, 2018). In today's global search engine market economy, Google and Baidu hold a market share exceeding 80% (Shao and Song, 2024). For a long time, Baidu has been the primary tool for the Chinese public to retrieve information. In the era of big data, products developed by Baidu, such as Wenxin Yiyan, Baidu Maps, and Baidu Video, provide users with diversified information search channels and have shaped new search interests and habits among users. Objectively, online data reflects, to some extent, the users' demand for information representation. In fact, Ginsberg et al. were among the first to apply internet user search data to predict influenza outbreaks (Ginsberg et al., 2009), achieving significant research results. Other scholars have been inspired by this research methodology and have applied it to various fields, including economics (Zhang et al., 2021), sports (Wu et al., 2023), and meteorology (Li et al., 2021).

However, among the numerous existing studies, there is a notable scarcity of research in the academic community that utilizes internet user search data within the field of moral education, particularly in the area of "ethics for teachers." In light of this, the present study employs the Baidu Index tool to analyze the data flow related to "ethics for teachers" as a focal point. This approach aims to clarify the temporal and spatial development patterns of public interest in "ethics for teachers," with the goal of expanding the research pathways in this area. Additionally, it seeks to provide academic references for ethics for teachers' research in other countries and regions.

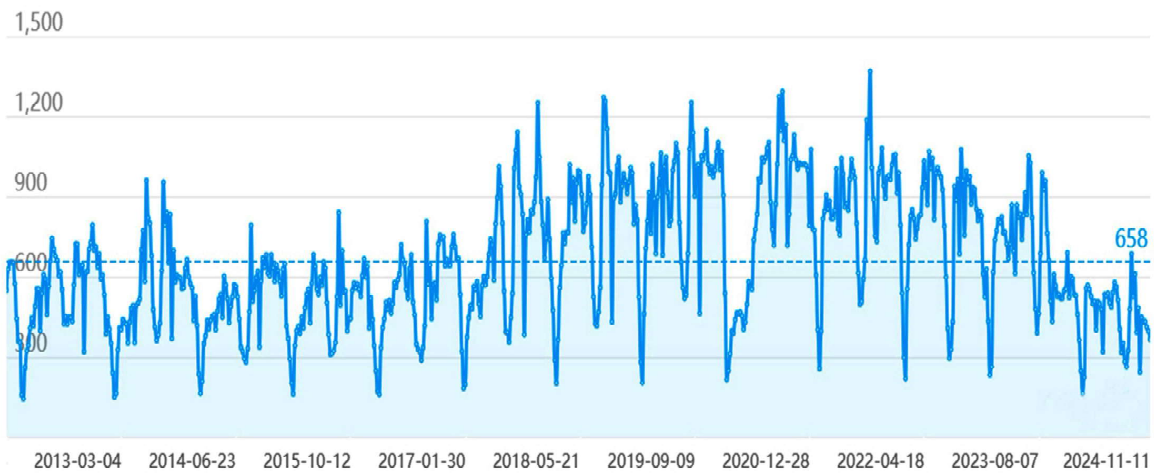
2. Materials and Methods

The Baidu Index, representative of the Fourth Industrial Revolution, is a data-sharing platform built on the search behaviors of numerous internet users. It not only achieves a perfect integration of statistics and big data but also provides an effective statistical tool for various industries to rapidly extract and analyze information phenomena and norms in an era of exponential growth in data volume. With the acceleration of globalization, interactions among countries in terms of politics, economy, culture, and science and technology have become increasingly close. After the introduction of internet technology from Europe and the United States into China, it has flourished, particularly driven by digital economy strategies such as "3G Construction," "Broadband China," and "Internet Plus" (Chen et al., 2024). The scale of Chinese internet users has shown a growing trend in the development of the digital society. In terms of industry penetration, Baidu Search ranks first across all platforms (CTR, 2023), and its Baidu Index service is favored by Chinese internet users. The Baidu Index, based on the robust user database of the Baidu search engine, can reflect the dynamic and regular demand of internet users in specific times and regions through keyword searches. It also characterizes demographic attributes and clearly represents the overall trends of keyword searches, including trends on PC and mobile platforms. ethics for teachers are crucial for student development, educational quality, social civilization, and national prosperity. To better understand public interest in "ethics for teachers," this study utilizes the Baidu Index platform with "ethics for teachers" as the keyword, capturing original search data from November 17, 2011, to November 17, 2024. Furthermore, to further explore and analyze public interest, this study will compare the captured original data with other keywords that are strongly correlated with "ethics for teachers" during the same period, thereby comprehensively and objectively measuring the temporal evolution characteristics of public search behavior regarding "ethics for teachers."

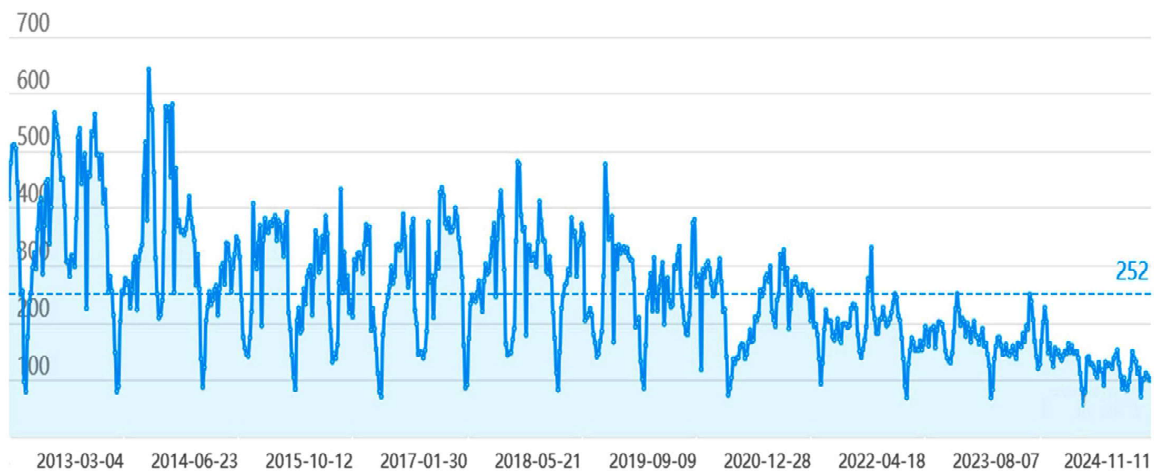
3. Results

By analyzing the Baidu Index for "ethics for teachers" from November 17, 2011, to November 17, 2024, it was found that the attention of Baidu users to "ethics for teachers" peaked around the times when the government issued relevant documents and just before Teacher's Day, while it began to decline during the winter and summer vacation periods (as shown in Figure 1). From an overall perspective, the search trend from November 17, 2011, to June 18, 2017, exhibited a small fluctuation with the highest search value not exceeding 1000. However, after May 2017, the search volume began

1. Average Trends of PC and Mobile Search



2. Search Trends and Averages for PC



3. Search Trends and Averages for Mobile Devices

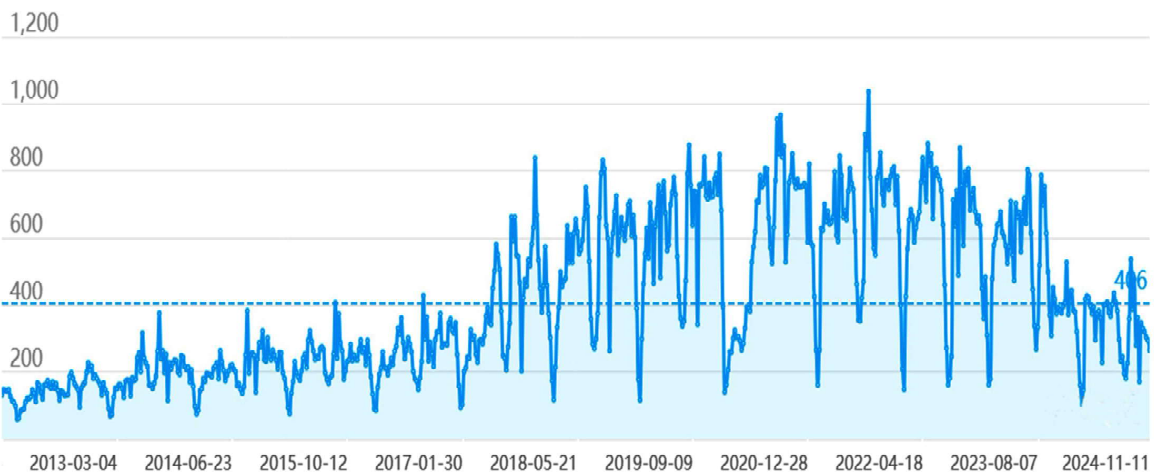


Figure 1: Baidu Search Trends and Averages for “Ethics for Teachers” from November 17, 2011, to November 17, 2024

to show a significant upward trend, with noticeable declines as well. A further examination of the search trend graphs for mobile, PC, and combined platforms reveals a high degree of consistency among the three curves, with mobile searches generally surpassing those on PC. The demographic profiling function of the Baidu Index clearly presents the distribution patterns of public searches for “ethics for teachers.” Statistical analysis of the online attention data indicates that the depth of color represents the level of attention. If we categorize blue into five levels—light blue, blue, dark blue, bright blue, and deep blue—these correspond to five levels of attention: “significant attention,” “considerable attention,” “attention,” “general attention,” and “slight attention.” Provinces, regions, and cities indicated by dark blue exhibit “significant attention” towards “ethics for teachers,” while light blue indicates “slight attention” (as shown in Figure 2). Notably, Guangdong Province, Shandong Province, Henan Province, Jiangsu Province, and the East China region consistently maintain a position of “significant attention” toward “ethics for teachers.” Additionally, the demographic attribute statistics from the Baidu Index reveal public attention characteristics regarding searches for “ethics for teachers”: the age group primarily ranges from 20 to 29 years, accounting for as much as 40% of the total. There is a significant gender disparity, with women comprising 76.01% of the search population (as shown in Figure 3). The comprehensive search data from the Baidu Index reflects the spatiotemporal differentiation of attention to “ethics for teachers” among various demographic groups across different spatial patterns in China, providing valuable insights for enhancing efforts in promoting ethics for teachers.

By ranking the search volume of keywords related to “ethics for teachers” from November 2023 to November 2024 in descending order, this study found that public interest peaked for “teachers’ ethics and manners.” The second and third places were “self-evaluation of ethics for teachers performance” and “reflections on the study of ethics for teachers and conduct,” respectively (Table 1). Subsequently, this study further compares the search trends of the keywords “ethics for teachers” and “teachers’ ethics and manners” from November 2011 to November 2024. The 13 years of search data reveal that the overall search trends for the two keywords exhibit a close similarity (as illustrated in Figure 4). The search data for the related term “teachers’ ethics and manners” surpasses that for “ethics for teachers.” These phenomena can, to some extent, reflect the actual needs of the public when using the Baidu Index to search for information. In order to grasp the connotation of “ethics for teachers,” users tend to select closely related keywords for retrieval, aiming to comprehensively and accurately explore its deeper meanings.

4. Discussion

The “ethics for teachers” serves as an important metric for assessing the educational development level of a region. In a vast country like China, characterized by a large population and complex national conditions (Duan and Huang, 2023), it is crucial to comprehensively and accurately understand public attention in order to provide reliable support for the high-quality realization of Chinese-style educational modernization. However, the advent of the big data era, while facilitating transformative changes in the learning and living experiences of the public, has also influenced public behavior to some extent. The internet has increasingly become the primary channel for public information exchange and social expression of opinions. It has become possible to profoundly interpret the phenomenon of public online attention based on internet big data. According to the latest statistical reports, as of June 2024, the number of internet users in China is approximately 1.1 billion, reflecting an increase of 7.42 million compared to data from December 2023, with the internet penetration rate in China reaching 78.0% (CNNIC, 2024). International researchers have made some explorations and progress using Google search data (Artola et al., 2015; Gunter and Önder, 2016), providing a research pathway for scholars in China to conduct related studies. In comparison, the Baidu search platform holds a dominant position in the Chinese search engine market (Ma, 2024), and the big data from the Baidu Index has gradually become an important basis for academic research among some Chinese scholars. Currently, researchers have begun to extend the application of the Baidu Index to various disciplines, including information science, communication studies, library science, finance, economics, tourism management, geography, sports science, and public health (Huang et al., 2017; Li et al., 2017). A review and analysis of the aforementioned studies reveal that existing research on the attention to “ethics for teachers” in the field of education based on the Baidu Index remains quite limited. Therefore, this study finds it necessary to utilize the Baidu Index tool to conduct an in-depth analysis of its historical evolution characteristics and the factors influencing its distribution.

According to the trend research data from the Baidu Index, the overall search index for “ethics for teachers” from November 17, 2011, to November 17, 2024, exhibits an initial period of stability followed by significant fluctuations. During each year’s winter and summer vacations, the index reaches a “low point,” while it gradually peaks around the issuance of relevant government documents concerning “ethics for teachers” and before and after Teacher’s Day.

Specifically, the analysis can be divided into phases: In the period from November 2011 to December 2016, the search index for “ethics for teachers” showed a stable fluctuation trend. This stability can be attributed to China’s rapid economic development and the transition of society during this period, as higher education entered a phase of massification. Although a number of exemplary teachers and inspiring stories emerged in the construction of professional ethics among university faculty, issues such as lax teaching standards, inappropriate behavior, weak awareness of educational responsibilities, and academic dishonesty remained prominent. In 2011, the Ministry of Education issued the “Code of Professional Ethics for Teachers in Higher Education,” followed by the issuance of the “Opinions on Establishing and Improving the Long-term Mechanism for ethics for teachers Construction in Primary and Secondary Schools” in 2013. In 2014, the Ministry of Education continued with the “Opinions on Establishing and Improving the Long-term Mechanism for ethics for teachers Construction in Higher Education,” aimed at strengthening the professional ethics and responsibilities of teachers in both higher education and primary and secondary schools. This policy provides fundamental guidelines for schools to carry out ethics for teachers construction work. This period also saw a growing and sustained interest among a large number of school staff, university students, and related professionals (Sun and Li, 2018). The search index peaked at 791 from August 25 to August 31, 2014, likely due to the announcement of the “Opinions on Carrying Out Pilot Work for Modern Apprenticeship” on August 25, which quickly drew public attention to the new requirements for ethics for teachers associated with this ground breaking pilot policy in China’s vocational education development. From January 2017 to November 2024, the Baidu search index for “ethics for teachers” exhibited considerable fluctuations, with an average annual growth rate surpassing that of the previous phase. The search index reached its highest point of 1396 from September 6 to September 12, 2021. The changes in search trends during this period can largely be attributed to a series of national policy documents that further strengthened the emphasis on “ethics for teachers” construction. For instance, the “Opinions on Deepening the Reform of Teacher Team Construction in the New Era,” issued in November 2017, emphasized the importance of enhancing the ideological and political quality and professional ethics of the teaching workforce, focusing on cultivating ethics for teachers throughout the educational process and implementing ethics for teachers’ construction projects. In November 2018, three documents were issued: the “Ten Guidelines for Professional Conduct of University Teachers in the New Era,” the “Ten Guidelines for Professional Conduct of Primary and Secondary School Teachers in the New Era,” and the “Ten Guidelines for Professional Conduct of Kindergarten Teachers in the New Era,” all of which underscored ethics for teachers as the primary standard for evaluating teacher quality and required schools at all levels to implement these guidelines, particularly in the daily management of the teaching staff, with strict accountability for violations of the guidelines. The “Opinions on Strengthening and Improving ethics for teachers and manners in the New Era,” issued in November 2019, further emphasized the need to solidify leadership responsibilities across departments, promote the principal responsibility of schools, and encourage collaborative participation from families and society in institutionalizing and normalizing the construction of ethics for teachers and manners. In April 2021, the “Notice on Conducting Special Education on ethics for teachers in the Education System” called for the organization and mobilization of teachers to study General Secretary Xi Jinping’s discourses on ethics for teachers, the “Four Histories,” exemplary ethics for teachers’ cases, and typical violations of the ten guidelines, while providing quality online learning resources and conducting supervision and inspections. In September 2021, the “Guiding Opinions on Improving the System and Mechanism for the Construction of Ideological and Political Work and ethics for teachers in Higher Education” proposed that universities establish dedicated departments to coordinate ethics for teachers work. In August 2022, a notice related to Teacher’s Day indicated that the Ministry of Education would hold activities themed around “The Decade of Education.” The “Opinions on Promoting the Spirit of Educators and Strengthening the Construction of a High-Quality, Professional Teacher Workforce in the New Era,” issued in August 2024, highlighted the importance of nurturing ethics for teachers, instilling a strong sense of purpose in educators, prioritizing ethics for teachers as the first standard, and regularly conducting ethics for teachers training. This series of important documents has provided fundamental guidelines and directional support for various regions, types of educational institutions, and teacher groups at all levels, including prospective teachers, thereby naturally eliciting varying degrees of attention from them. Additionally, a comparison of the search trends between PC and mobile platforms during the same period reveals significant differences; the average search index for mobile devices was 406, while that for PCs was 252, indicating a clear preference among the public for using mobile devices to search for information. This preference may be attributed to the inherent characteristics of mobile and PC platforms, as well as the expansion of the user base for mobile devices. In 2014, the number of internet users accessing the internet via mobile devices in China first surpassed that of those using computers (Xie et al., 2023). A comparison of the number of mobile internet users in China between 2014 and 2024 shows an increase from 527 million (CNNIC, 2024) to 1.096 billion (CNNIC, 2024) over the course of ten years, representing more than a twofold growth (with 527 million mobile internet users in 2014).

During the winter and summer vacation periods each year, public searches for “ethics for teachers” reach a “low point,” primarily because both teachers and students are generally in a state of rest during these breaks in China. Conversely, there tends to be an observable increase in search activity around Teacher’s Day and following the issuance of relevant government documents concerning “ethics for teachers.” This trend can be attributed to the fact that, during this time, various levels and types of schools organize online and offline promotional activities as well as teacher recognition events, which highlight the noble image of “good teachers” through diverse formats. Consequently, the public tends to focus on the professional lives of teachers during this period. Additionally, when educational administrative departments and schools implement the directives outlined in the national documents related to “ethics for teachers,” they often organize various forms of professional development activities centered around ethics for teachers. This, in turn, generates increased online attention from educators regarding “ethics for teachers.”

The demand mapping feature of Baidu Index can display the relevance of search terms related to “ethics for teachers” and the demand intensity of these related search terms. Given that this demand map only shows search data for one year, this study will analyze the top ten related terms ranked weekly from November 20, 2023, to November 17, 2024. The top ten related terms identified in descending order are presented in Table 1. The terms include “teachers’ ethics and manners,” “self-evaluation of ethics for teachers,” “insights and reflections on ethics for teachers and teacher style,” “teacher professional ethics,” “personal summary of ethics for teachers and teacher style,” “summary of ethics for teachers,” “standards of teacher professional ethics,” “four qualities of a good teacher,” “performance of ethics for teachers,” and “cultivating virtue and nurturing people.” Among these, “teachers’ ethics and manners” and “self-evaluation of ethics for teachers” stand out with particularly high search popularity. This is understandable, as “ethics for teachers” is an abbreviation for teacher professional ethics. Teacher style is a concrete manifestation of teacher professional ethics, reflected through words and actions in educational practices. Therefore, ethics for teachers and teacher style coexist. When the public searches for “ethics for teachers,” they are likely to delve deeper into the related term “teachers’ ethics and manners” to gain a comprehensive understanding of the precise connotation of “ethics for teachers.” “Self-evaluation of ethics for teachers” is an important criterion in teacher ethics assessments. It draws significant attention from educators, particularly during school evaluations, title assessments, and professional development.

Table 1: The Top 10 Related Terms with the Highest Search Popularity from November 20, 2023 to November 17, 2024

| Sorting | Related Terms | Frequency |
|---------|---|-----------|
| 1 | Teachers’ ethics and Manners | 44 |
| 2 | Self-Evaluation of ethics for teachers Performance | 33 |
| 3 | Reflections on the Study of ethics for teachers and Conduct | 29 |
| 4 | Professional Ethics for Educators | 16 |
| 5 | Personal Summary of ethics for teachers and Conduct | 15 |
| 6 | Summary of ethics for teachers | 12 |
| 7 | Code of Professional Ethics for Educators | 11 |
| 8 | The Four Qualities of a Good Teacher | 11 |
| 9 | Performance in ethics for teachers | 9 |
| 10 | Cultivating Virtue and Nurturing Talent | 8 |

From the perspective of geographical spatial distribution, the attention distribution of “ethics for teachers” at the provincial level shows a hierarchical pattern. As indicated in Figure 2, the provinces with the highest levels of attention are Guangdong, Shandong, Henan, and Jiangsu, followed by Zhejiang, Beijing, Hebei, Sichuan, Hubei, and Anhui, which rank among the top ten provinces. In terms of urban spatial distribution, the cities with the highest attention levels are Beijing, Shanghai, Hangzhou, Zhengzhou, Chengdu, Guangzhou, Tianjin, Wuhan, Xi’an, and Jinan, indicating that cities in the eastern region exhibit a greater focus on “ethics for teachers.” Regarding regional spatial distribution, the

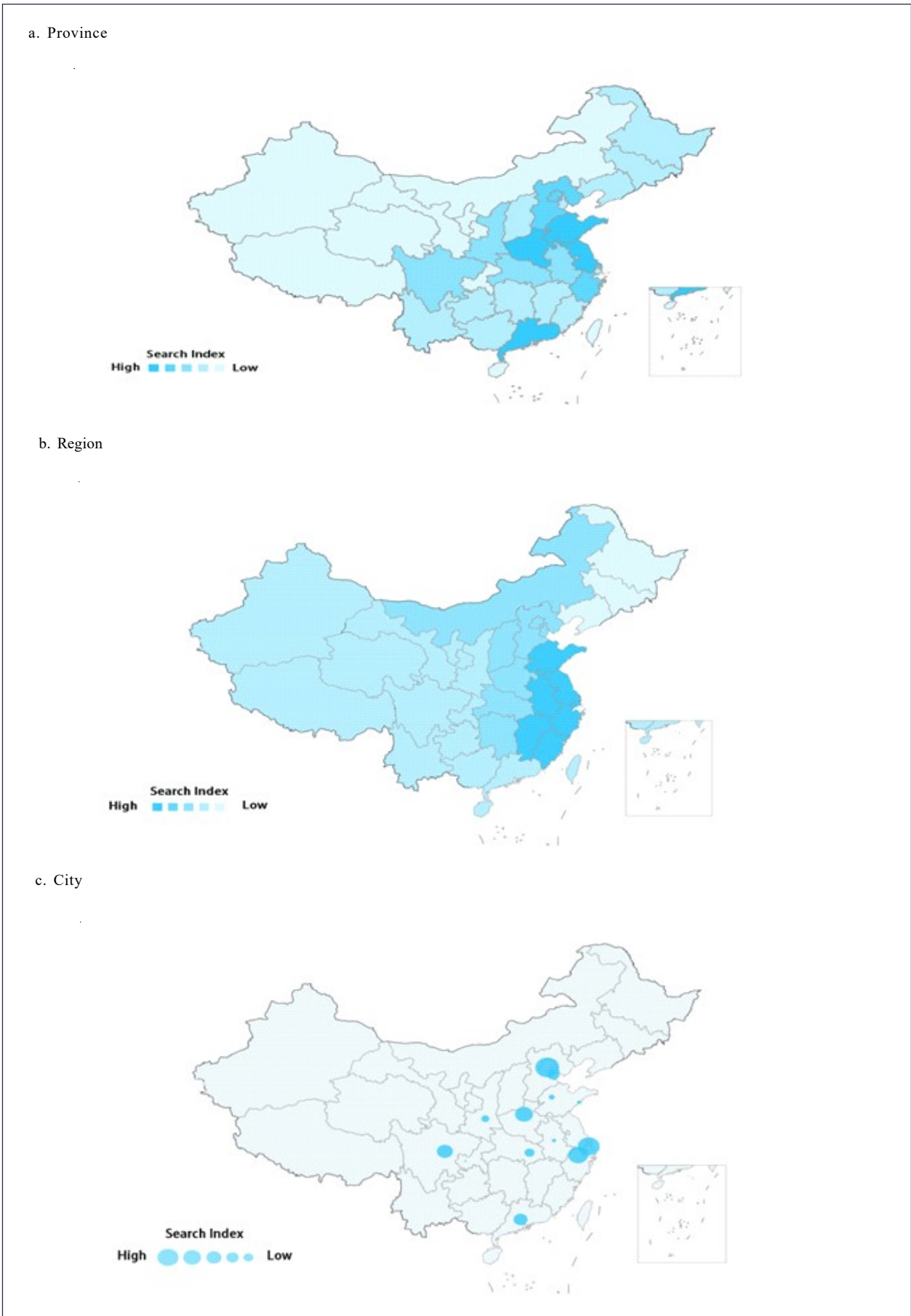


Figure 2: 2013.07.01 - 2024.11.17 (a) Provincial, (b) Regional, (c) Urban Profiles of the “Ethics for Teachers” Population

order is as follows: East China, North China, Central China, South China, Southwest, Northwest, and Northeast, demonstrating that the East China and North China regions have the highest levels of attention.

The study analyzes the demographic attributes of the population concerned with “ethics for teachers” during the period from October 1, 2024, to October 31, 2024 (Figure 3). It is evident that the attention of the female population (76.01%) surpasses that of the male population (23.99%). From an age perspective, the population concerned with “ethics for teachers” is primarily concentrated in the 20-29 and 30-39 age groups, accounting for a total of 69.76%. The highest proportion is found in the 20-29 age group, which constitutes 40%. This group mainly consists of university students and young professionals in the education sector, or graduates seeking positions in education, who are eager to understand ethics for teachers in order to meet job requirements or adapt to new roles. The second largest group is the 30-39 age group, primarily comprising mid-career educators and parents of school-aged children. Their interest in ethics for teachers is relatively high, as they seek to understand aspects such as professional title evaluations, annual assessments, and daily training related to ethics for teachers, or due to concerns about the ethical practices of their children’s teachers (Li, 2023). Next is the 40-49 age group, which includes long-serving educators and parents. This demographic is typically in a mature stage of their careers or has children who have been in school for several years, resulting in a relatively lower level of concern for ethics for teachers. Finally, the attention of those aged 19 and below, as well as those aged 50 and above, is notably lower. This is primarily due to the heavy academic burdens faced by students in basic education, who may be overwhelmed by competitive pressures (Shang and Man, 2019), leaving them

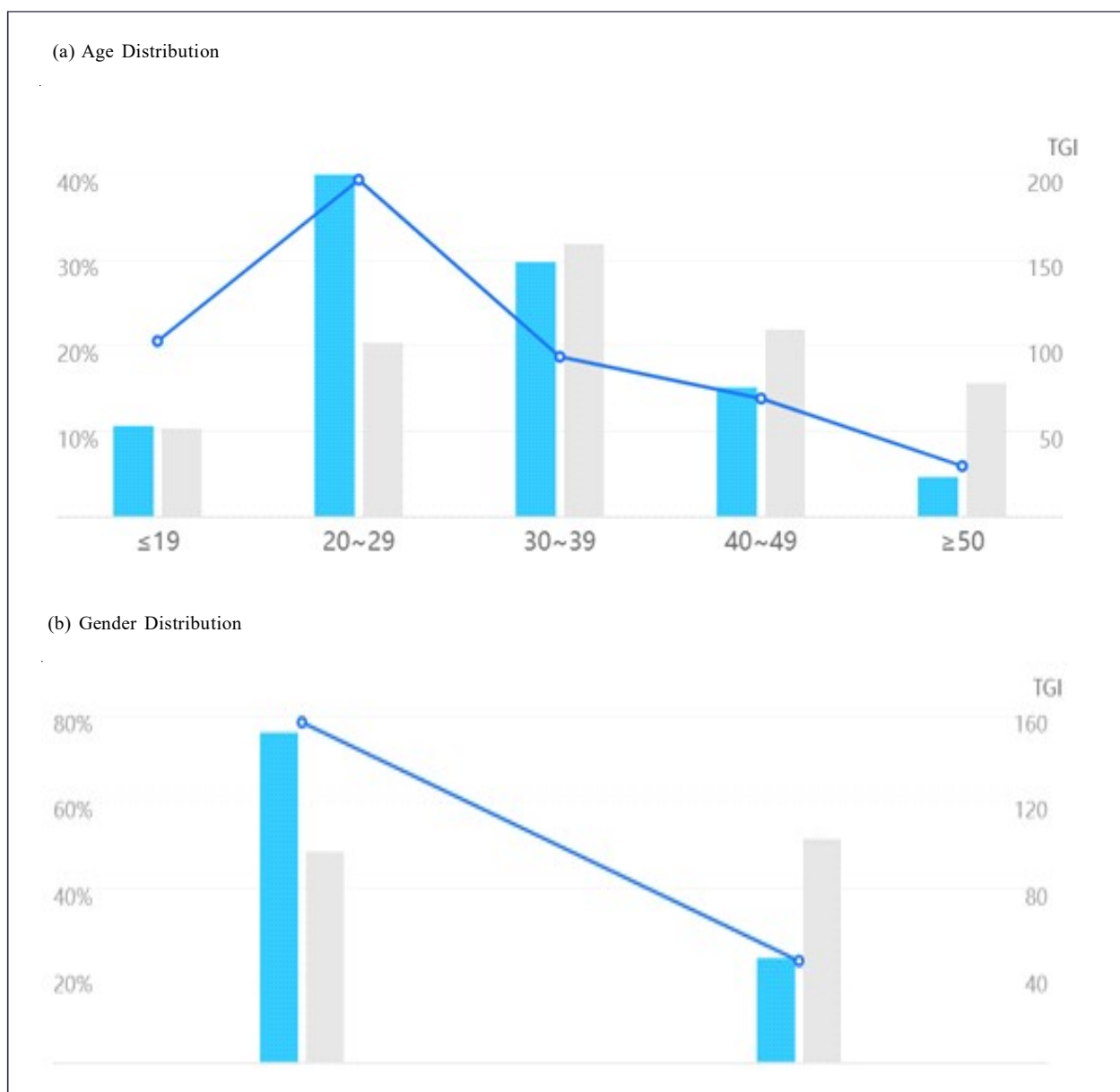


Figure 3: Distribution of Population Attributes by (a) Age and (b) Gender

little time to focus on such issues. Additionally, older educators and parents tend to rely on traditional media channels for information (Wang, 2019) and rarely seek information using modern internet search engines.

The study also found that the Baidu Index trends for the keyword “ethics for teachers” and the related term “teachers’ ethics and manners” are largely similar (see Figure 4). The search interest for “ethics for teachers” and the related term “teachers’ ethics and manners” “ is slightly higher than that for “ethics for teachers” This may suggest that when the public uses the Baidu Index to search for information on “ethics for teachers,” they are seeking to gain a deeper understanding of its specific manifestations, leading them to more frequently select the related term “teachers’ ethics and manners” in order to better comprehend its essence. This phenomenon also reflects the public’s level of awareness regarding the keyword “ethics for teachers”

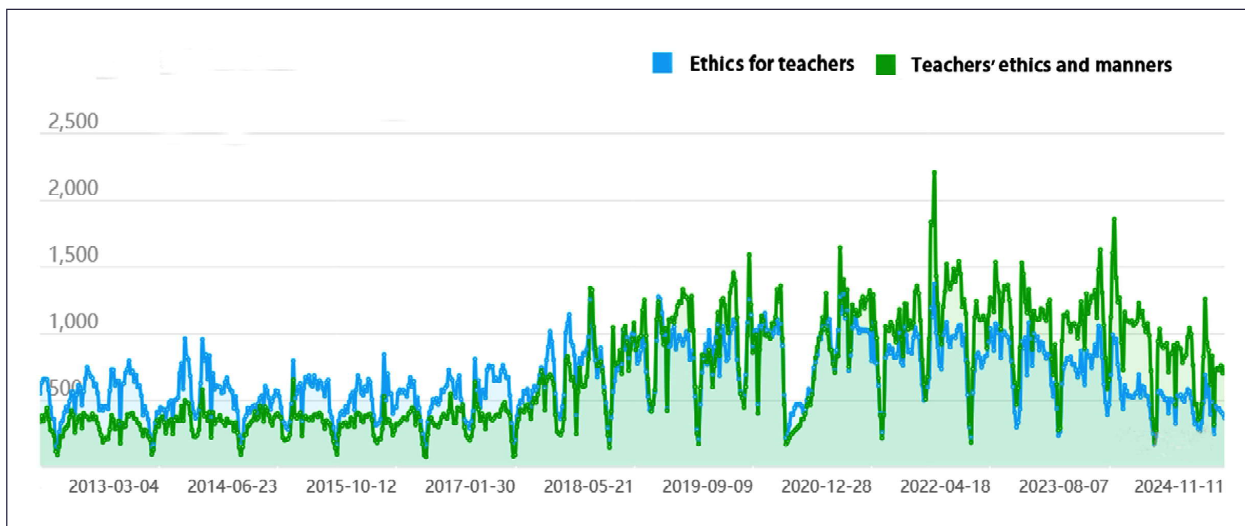


Figure 4: The Search Trends Related to “Ethics for Teachers” and “Teachers’ Ethics and Manners”

This study utilizes Baidu Index as a tool to depict the attention given to “ethics for teachers” and its related term “teachers’ ethics and manners” from various dimensions. It not only provides a visual reflection of the public’s interest in “ethics for teachers,” but also offers data support for the development of ethics for teachers initiatives, which is of significant practical importance for enhancing the overall ethical standards of the teaching workforce. With the rapid advancement of internet technology, the channels through which people obtain information have become increasingly diversified. In addition to traditional sources such as telephone, television, print media, and radio, modern information channels now include search engines, social media, specialized information websites, and academic databases. As the most favored search platform among Chinese internet users, Baidu Index possesses powerful data analysis capabilities that can assist in understanding public attention. However, it cannot accurately and profoundly describe the true motivations, values, and emotional states behind public search behaviors. There are differences in digital literacy among different types of internet users when utilizing Baidu Index, which may lead to incomplete data. Moreover, the limitations of the researcher’s data analysis capabilities may introduce certain constraints to the study. Given the advantages of Baidu Index, such as its vast public user base in China, excellent algorithm performance, and reliable information resources, this research attempts to leverage it to gauge public attention towards “ethics for teachers,” aiming to reflect the public’s behavioral needs and interests as deeply as possible. The keyword data for “ethics for teachers” presented by Baidu Index indicates that part of the audience may include school teachers, education administrators, college students, parents of students, and job seekers interested in educational positions, while another segment may consist of academic researchers engaged in “ethics for teachers” or related fields. However, Baidu Index does not provide insights into the value pursuits of these audiences regarding “ethics for teachers” or their emotional states at the time of search. These aspects require further breakthroughs in Baidu Index’s technological development.

5. Conclusion

This study focuses on the public attention towards “ethics for teachers,” utilizing Baidu Index data as a tool to measure the temporal and spatial interest in “ethics for teachers.” The findings provide new insights for the construction of ethics for teachers in schools within the context of big data. The results indicate that the search volume for “ethics for teachers” on Baidu Index shows a declining trend during school vacations, with significant fluctuations occurring around Teacher’s Day each year and in response to the issuance of relevant national documents regarding “ethics for

teachers.” In terms of spatial distribution, provinces and cities in the eastern region exhibit a stronger online interest in “ethics for teachers,” while the central region shows relatively weaker attention. Regarding gender, the female population demonstrates a greater interest in “ethics for teachers” compared to their male counterparts. Additionally, the age distribution reveals that individuals aged 20 to 39 represent a substantial portion of the interest in this topic. The keyword “ethics for teachers” exhibits a similar public attention trend to the related term “teachers’ ethics and manners,” with the overall daily average and moving daily average for the latter being slightly higher than those for the former.

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