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Using Baidu Index to Evaluate the Online Attention of Law on the Standard Spoken and Written Chinese Language

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Abstract

The research is based on Baidu Index tool obtains the search trend and distribution characteristics of the keyword "Law on the Standard Spoken and Written Chinese Language" from January 1, 2011, to March 15, 2024. The study reveals that the public's attention to it shows regular changes. The search trend remained relatively stable from 2011 to 2016, started to rise in 2017, and reached its peak in September 2023. The audience interested in the "Law on the Standard Spoken and Written Chinese Language" is mainly distributed in regions such as Xinjiang, Inner Mongolia, Beijing, and Shandong, and mainly consists of females aged 30-39. Factors influencing the search volume trend of the "Law on the Standard Spoken and Written Chinese Language" include the promotion of Mandarin Chinese, traditional Chinese ethnic festivals, education poverty alleviation actions, rural revitalization plans, strengthening the common consciousness of the Chinese nation, and language policies issued by the Ministry of Education and the National Language Commission. The public is more interested in the full name of the "Law on the Standard Spoken and Written Chinese Language," which is the "Law on the Standard Spoken and Written Chinese Language of the People's Republic of China," as well as the "Education Law".

Keywords: Search engine, Baidu index, Law on the standard spoken and written Chinese language of the people's republic of China

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1. Introduction

Since the implementation of the "Law of the People's Republic of China on the Standard Spoken and Written Chinese Language" in 2001, the level of language governance, language soft power, and popularity in the country have been effectively improved. Especially after the 18th National Congress of the Communist

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Party of China, a series of policies such as the “National Medium and Long-term Plan for Language Reform and Development (2012-2020)”, “Action Plan for Poverty Alleviation through Promoting the Use of Standard Spoken and Written Chinese (2018-2020)”, “Implementation Plan for Popularizing the Standard Spoken and Written Chinese Language”, and “Opinions on Strengthening Language Work in the New Era” have provided favorable conditions for the public to learn and use the national standard spoken and written Chinese language. The “Law of the Standard Spoken and Written Chinese Language” has become a topic of public concern. First, the national standard spoken and written Chinese language helps the public improve their overall quality and abilities, enhance their competitiveness in employment, quickly overcome poverty, and achieve common prosperity. Just as the “Ferguson-Pulley blank Hypothesis” proposes the correlation between language and poverty, it believes that a country with an extremely complex language is always underdeveloped or semi-developed, while a highly developed country has a high degree of language unity (Pool, 1972). The national standard spoken and written Chinese language plays such an important role in the national poverty alleviation cause (Li *et al.*, 2018), which is bound to attract high attention from social groups. Second, the improvement of the national standard spoken and written Chinese language requires sufficient investment in educational resources. For example, the popularization of Mandarin teachers in preschool education, the renovation of teaching facilities and equipment in primary and secondary schools, the improvement of teachers’ teaching ability in the national standard spoken and written Chinese language, and the “Ten Thousand Teachers Supporting Education” project (Li, 2022) greatly affect practitioners at all levels and in all types of educational institutions. Third, the popularization of the national standard spoken and written Chinese language requires the participation of social forces. This has had a profound impact on e-commerce personnel, artisans, broadcasters, hosts, film and television actors, and tour guides (Yuan and Chen, 2023; Inner Mongolia Autonomous Region Education Department, 2021). The “Law of the Standard Spoken and Written Chinese Language” and the series of related policies and measures are important strategies made by the country with targeted measures in order to comprehensively build a moderately prosperous society and achieve common prosperity. They are of great concern to the country and supported by the general public, and are related to the realization of Chinese-style modernization. The motivation for the research in this paper is inspired and guided by the above-mentioned content.

With the rapid development and popularization of mobile internet technology (Kang and Li, 2024), big data technology is gradually permeating various fields, bringing unprecedented changes to human society, including legal policies and education. Especially in recent years, internet technology has made significant progress, particularly with the strong promotion of big data technology. As a product of the information technology era, search engines have greatly satisfied people’s needs for information retrieval. At the same time, social science research has increasingly focused on the analysis of web search data, and many scholars have started to use web search data as a new source of research data to explore various behavioral patterns in society. In China, Baidu is undoubtedly the most widely used search engine (Yin *et al.*, 2022), accompanied by the rise of a series of data collection and analysis tools such as Baidu Statistics, and Baidu Index. These tools have demonstrated a high level of accuracy in predicting user behavior. In fact, web search data was first applied to predict influenza outbreaks, a method proposed by Ginsberg *et al.* (2009). Subsequently, scholars gradually expanded this method to various fields such as travel consumption behavior (Davidson and Yu, 2005), economics and finance (Moussa *et al.*, 2017), public fashion (Liu and Li, 2023), environmental science (Li *et al.*, 2021), and social sentiment (Qiu and Li, 2018). However, there is relatively little research on the application of internet search data in the fields of legal policies and education, particularly in relation to the “Law of the Standard Spoken and Written Chinese Language”. Therefore, this study aims to explore the temporal and spatial evolution of public attention to the “Law of the Standard Spoken and Written Chinese Language” using the tool Baidu Index.

2. Materials and Methods

Baidu Index, as a data statistical analysis platform based on Baidu’s massive web user behavior data (Yang, 2020), is not only a key statistical analysis tool in the internet and data era, but also an important basis for enterprise development, brand marketing, news media hotspot analysis, and tourism management services. With the popularity of the internet, the number of internet users in China has gradually grown, with search

engine users occupying a significant proportion. Baidu, as the largest Chinese search engine globally, has launched the Baidu Index big data analysis platform, which is based on web user behavior data and provides authoritative data sharing. Up to now, it has built a powerful functional module system (Baidu, 2021). It can comprehensively present the overall trends of individual keywords, PC and mobile trends, reveal demand patterns and public sentiment dynamics, depict audience profiles, and also gain insights into the overall trends of industries, analyze geographical distribution patterns, dissect audience attribute characteristics, and capture search time patterns. In order to conduct an in-depth study on the public's attention to the "Law of the Standard Spoken and Written Chinese Language", this study collected online search trend data from January 1, 2011 to March 15, 2024 on the Baidu Index platform using the keyword "Law of the Standard Spoken and Written Chinese Language". In addition, to gain a more comprehensive understanding of changes in public concerns, we also conducted a comparative analysis between the collected data and the keyword "Law of the Standard Spoken and Written Chinese Language of the People's Republic of China" during the same period, in order to evaluate the temporal evolution characteristics of public attention to the "Law of the Standard Spoken and Written Chinese Language".

3. Results

After conducting the research, it was found that the online search trend for the keyword "Law of the Standard Spoken and Written Chinese Language" reaches its peak every September and reaches its lowest point around the time of the Spring Festival. The trend was stable between 2011 and 2016, but showed a gradual increase followed by a decrease after 2017 (as shown in Figure 1). Whether the search was conducted on a mobile device or a computer, the trends displayed by Baidu Index showed a high degree of similarity. The audience profile generated by Baidu Index provided us with a clear distribution of search volume. After analyzing the search data in depth, it was discovered that the provinces and cities identified by the deep blue area significantly outperformed others in terms of search volume for the "Law of the Standard Spoken and Written Chinese Language" (as shown in Figure 2). This fully reveals that the northwest and north China regions in China have a higher level of attention to the "Law of the Standard Spoken and Written Chinese Language" legal policy. The audience attribute data provided by Baidu Index further revealed the characteristics of users who searched for content related to the "Law of the Standard Spoken and Written Chinese Language": the main age group of searchers is between 30 and 39 years old, accounting for a high proportion of 36.98%, and female users have a significant advantage, accounting for 65.75% (as shown in Figure 3). These data not only demonstrate the differences in attention to the "Law of the Standard Spoken and Written Chinese Language" legal policy among different regions and demographics, but also provide strong evidence for us to better understand the social impact of this policy.

After sorting and analyzing popular search terms, we found that Baidu users' attention to the "Law of the Standard Spoken and Written Chinese Language of the People's Republic of China" is the most significant. In this study, we compiled the changes in the demand pattern from March 15, 2023 to March 15, 2024, and the results showed that the attention to the "Law of the Standard Spoken and Written Chinese Language of the People's Republic of China" was closely followed by the "Education Law", ranking second (as shown in Table 1). At the same time, by comparing the search trends of the "Law of the Standard Spoken and Written Chinese Language of the People's Republic of China" and the "Law of the Standard Spoken and Written Chinese Language", we found that the search curves of the two are similar (as shown in Figure 4). The search volume for the "Law of the Standard Spoken and Written Chinese Language of the People's Republic of China" is higher than that for the "Law of the Standard Spoken and Written Chinese Language". This phenomenon is closely related to people's habits when using search engines. Usually, in order to obtain more accurate information, users tend to enter more keywords for their search. Users prefer to use the full name "Law of the Standard Spoken and Written Chinese Language of the People's Republic of China" to ensure that the information obtained is more accurate and comprehensive.

4. Discussion

As a nationwide language legal policy in China, the "Law of the Standard Spoken and Written Chinese Language" is difficult to comprehensively grasp in a country with a large population and significant regional

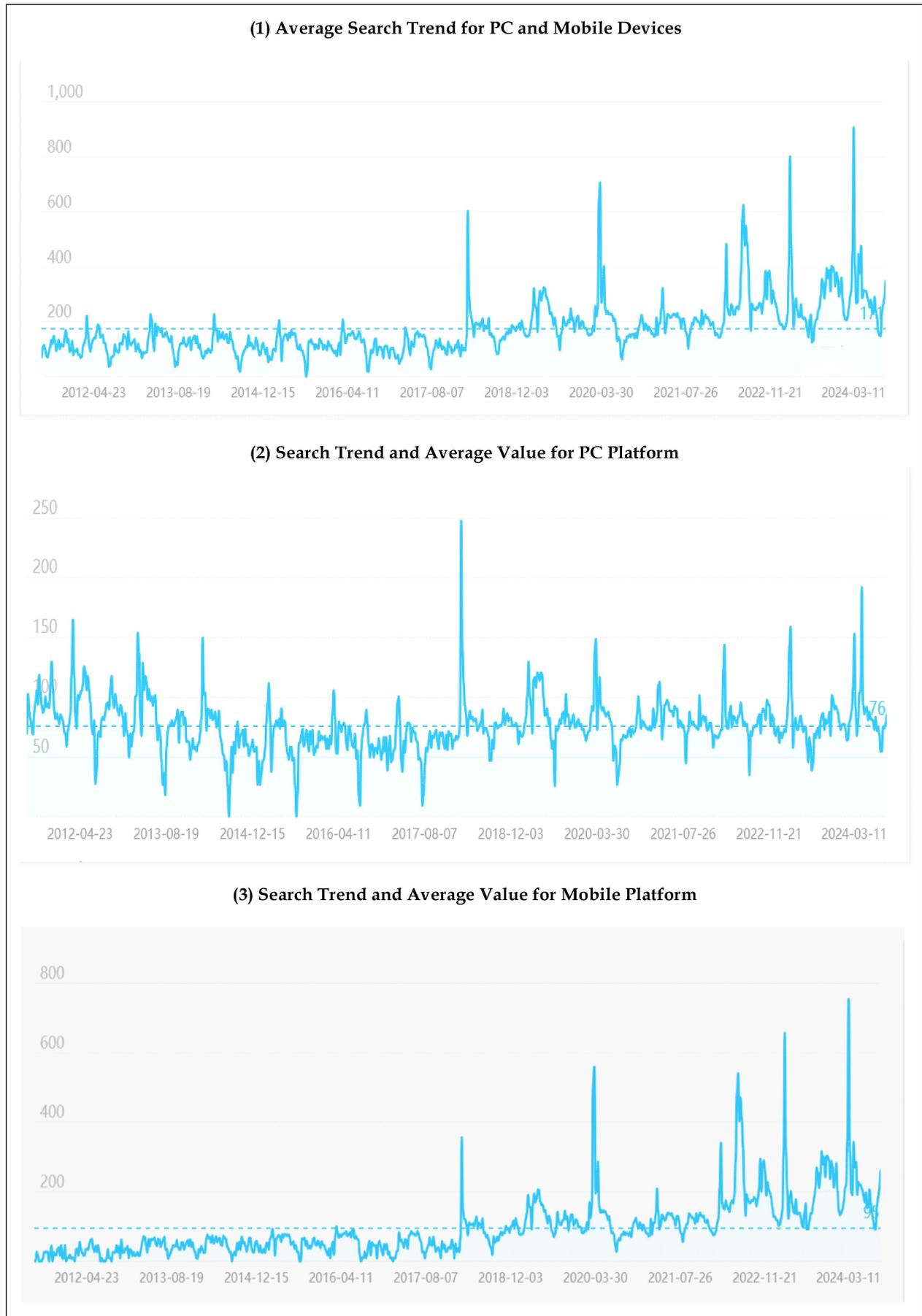


Figure 1: Illustrates the Baidu Search Trend and Average Value for the “Law on the Standard Spoken and Written Chinese Language” from January 1, 2011, to March 15, 2024

differences (Wu, 2023). However, the rapid rise of internet big data provides a powerful tool for revealing this complex phenomenon. As of June 2023, the number of search engine users in China has reached 841 million, an increase of 39.63 million compared to December 2022, accounting for 78.0% of the overall internet users (China Internet Network Information Center, 2023). Foreign scholars have mainly used Google search engine data for their research, and have achieved remarkable results (Askitasklau *et al.*, 2015; Gunter and Oender, 2016). In comparison, Baidu search engine is more frequently used in China (Wei and Lei, 2022), especially Baidu Index (Yang *et al.*, 2015). Scholars have already applied Baidu Index in various disciplines such as intelligence, journalism and communication, library science, finance, economics, tourism management, geography, sports science, and public health (Huang *et al.*, 2017; Li *et al.*, 2017). However, through literature review, it has been found that further exploration is needed to apply Baidu Index in analyzing the attention to legal policies. In view of this, based on the Baidu Index of the “Law of the Standard Spoken and Written Chinese Language” from 2011 to 2024, this study will deeply investigate the evolving trends of public attention and the influencing factors.

The trend analysis module of Baidu Index shows that the search volume for the keyword “Law of the Standard Spoken and Written Chinese Language” exhibits a pattern of stable development, followed by a rapid increase and subsequent decline from January 1, 2011, to March 15, 2024, reaching peaks around September and lows around February each year. Specifically, in the first phase (2011-2016) of the analysis, the stability in the search volume for the “Law of the Standard Spoken and Written Chinese Language” can be attributed to the shift in national focus from eradicating illiteracy to promoting the education of the standard spoken and written Chinese language after the successful completion of the “Two Basics” campaign (Chen and Liu, 2022). The National Medium- and Long-Term Plan for Language and Writing Reform and Development (2012-2020), issued in 2012, set the goal of achieving basic popularization of Mandarin Chinese nationwide by 2020 (National Language and Writing Working Committee of the Ministry of Education, 2012), which naturally attracted sustained attention from the public towards the “Law of the Standard Spoken and Written Chinese Language”. In the second phase (2017-2024) of the analysis, the rapid increase and subsequent decline in the search volume for the “Law of the Standard Spoken and Written Chinese Language” can be attributed to the intensified efforts by the government to promote the standard spoken and written Chinese language. For example, the Implementation Plan for the Popularization of the Standard Spoken and Written Chinese Language, issued in 2017, explicitly emphasized the promotion of the standard spoken and written Chinese language, with a focus on rural and ethnic areas, especially in the western regions, in conjunction with targeted poverty alleviation efforts (Ministry of Education, National Language Commission, 2017). The Action Plan for Poverty Alleviation through Promoting Mandarin Chinese (2018-2020), released in 2018, further targeted areas with relatively low Mandarin Chinese proficiency rates and the young and middle-aged labor force, who are the mainstay of society (Ministry of Education, State Council Poverty Alleviation Office, National Language Commission, 2018). The Opinion on Achieving Effective Connection between Consolidating and Expanding Educational Poverty Alleviation Achievements and Rural Revitalization, issued in 2021, proposed that the standard spoken and written Chinese language should contribute to rural revitalization, with a focus on teachers, young and middle-aged labor force, and grassroots cadres (Central Committee of the Communist Party of China, State Council, 2021). The Outline for the Development of Chinese Women (2021-2030) also highlighted the need to strengthen the education of the standard spoken and written Chinese language for young and middle-aged women (State Council, 2021). This period witnessed a focus on ethnic regions (Li and Yang, 2023; Dang and Han, 2023; Wang, 2023), remote rural areas (Liu, 2022), and impoverished areas in the Three Regions and Three Prefectures (Chen, 2021; Zeng, 2023; Huang, 2022), with an emphasis on teachers (Su, 2023), grassroots cadres (Pu, 2023), and young and middle-aged women. This inevitably led to a rapid increase in attention from these groups and regions. In addition, significant differences were found between the search volume on PC and mobile devices, but the overall trends were similar, with the public showing a preference for mobile searches. This indicates the convenience of mobile search tools and the rapid increase in mobile internet users. In terms of internet access devices, traditional desktop computers have rapidly declined and have been surpassed by smartphones. By the late 2010s, smartphones accounted for over 99% of internet access devices (Fang and Wang, 2023). With the commercialization of 5G in 2019, as of June 2023, the number of mobile

internet users in China has reached 1.076 billion, an increase of 11.09 million compared to December 2022, with 99.8% of internet users accessing the internet through mobile devices ([China Internet Network Information Center, 2023](#)). The peak in searches for the “Law of the Standard Spoken and Written Chinese Language” around September each year is mainly due to the fact that the third week of September is designated as National Mandarin Promotion Week, during which various institutions and departments organize activities. The low point around February each year is attributed to the traditional Chinese festival - the Spring Festival, which holds significant cultural importance for the Chinese people ([Jing, 2008; Xiao, 2024](#)), and the public usually celebrates the festival and enjoys quality time with their families.

The demand map data from Baidu Index clearly illustrates the level of public attention and distribution of demand for the keyword “Law of the Standard Spoken and Written Chinese Language”. Since the demand map is based on a weekly basis to display data within a year, in order to further study the public’s attention to the “Law of the Standard Spoken and Written Chinese Language”, the top 10 related keywords with the highest search volume each week from March 15, 2023, to March 15, 2024, were compiled and the top 10 related keywords (Table 1) were selected. It was found that the search volume for the keywords “Law of the Standard Spoken and Written Chinese Language of the People’s Republic of China” and “Education Law” were particularly prominent. This result is not difficult to understand. The reason is that “Law of the Standard Spoken and Written Chinese Language of the People’s Republic of China” is the full name of the “Law of the Standard Spoken and Written Chinese Language”, and the former has more legal authority and higher recognition among the public. The public tends to search for the full name to obtain accurate information about its content. “Education Law” was amended for the first time on August 27, 2009, the second time on December 27, 2015, and the third time on April 29, 2021. Article 12 of the general provisions of the “Education Law” clearly stipulates that schools and other educational institutions should use the standard spoken and written Chinese language for education and teaching. Article 35 of Chapter 4 specifically states that the state implements a system of teacher qualifications, positions, and appointments, and improves the quality of teachers and strengthens the construction of the teaching staff through assessment, rewards, cultivation, and training. This naturally requires teachers to improve their own teaching proficiency in the standard spoken and written Chinese language and use it in a standardized manner, which inevitably leads the public to search for further understanding of the “Teacher Law”.

Rank	Related Keywords	Frequency
1	Law on the Standard Spoken and Written Chinese Language of the People’s Republic of China	26
2	Education Law	21
3	Education Law of the People’s Republic of China	17
4	Promotion of Family Education Law	16
5	Teacher Law	16
6	Compulsory Education Law	14
7	Vocational Education Law	14
8	Teacher Law of the People’s Republic of China	14
9	Promotion of Family Education Law of the People’s Republic of China	9
10	Ethnic Regional Autonomy Law	8

From the perspective of regional distribution, the focus of attention is mainly concentrated in Xinjiang, followed by Inner Mongolia, both of which rank high among provinces (Figure 2). The overall development of Mandarin Chinese proficiency shows an uneven distribution, with “low-lying areas” mainly concentrated in western remote areas, impoverished areas, and ethnic regions ([National Language and Writing Working Committee, 2021](#)). Naturally, Xinjiang and Inner Mongolia receive widespread attention. From the perspective

of city distribution, the top five cities are Hotan, Urumqi, Beijing, Shanghai, and Kashgar, indicating that during this time period, cities in western regions are more concerned about the “Law of the Standard Spoken and Written Chinese Language” compared to cities in the eastern regions.

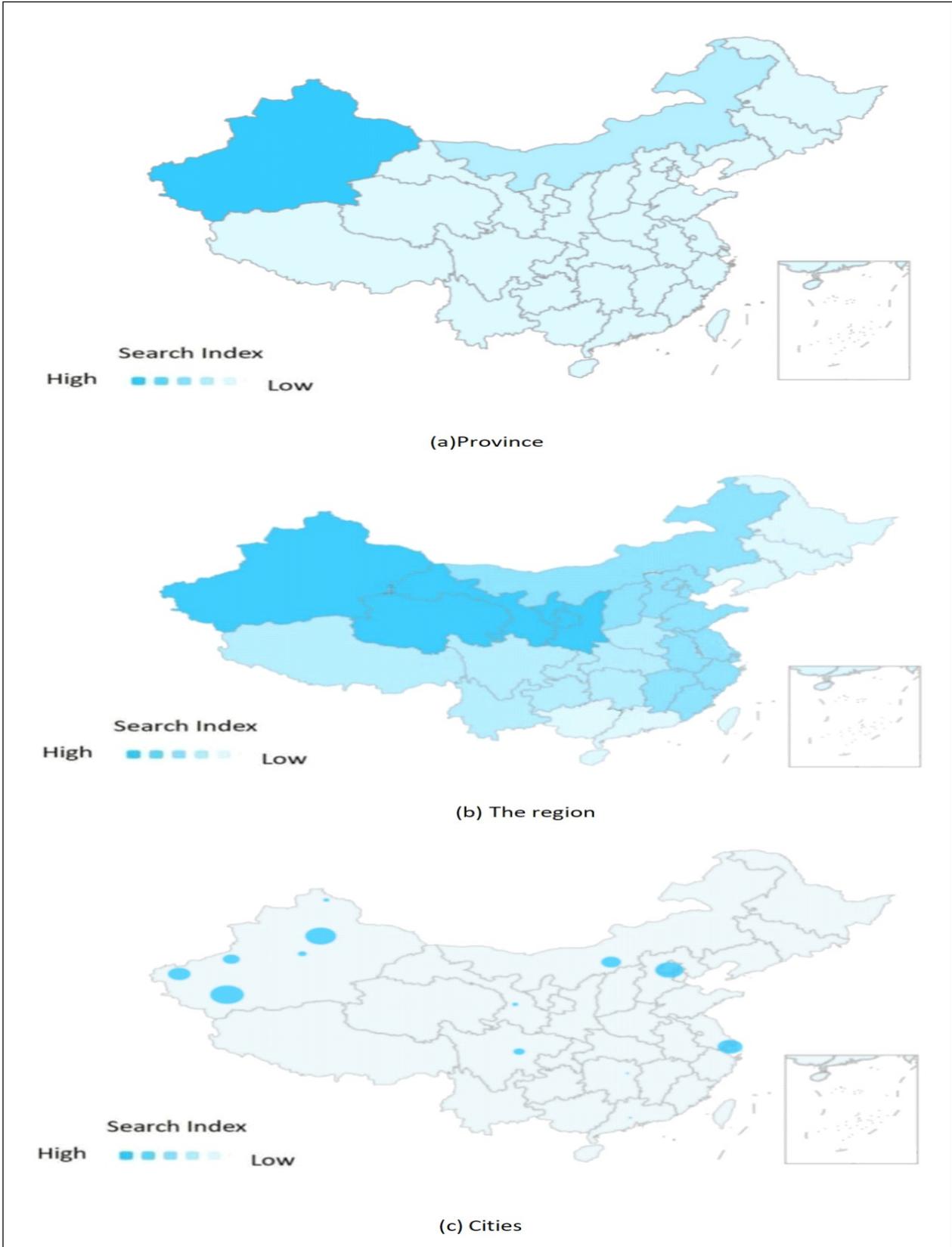


Figure 2: Depicts the Demographic Profile of the Population Concerning the “Law on the Standard Spoken and Written Chinese Language” from July 1, 2013, to March 15, 2024. The Figure Includes (a) Provincial, (b) Regional, and (c) Urban Breakdowns

In this study, the analysis of the level of attention to the “Law of the Standard Spoken and Written Chinese Language” among different demographic groups during the period from March 1, 2024, to March 15, 2024, was conducted (Figure 3). It was found that females (65.75%) showed a higher level of attention compared to males (34.25%). From the perspective of age distribution, the age group of 30-39 years old demonstrated the highest level of attention (36.38%), mainly consisting of teachers, young and middle-aged workers, and grassroots cadres who are concerned about the “Law of the Standard Spoken and Written Chinese Language”. The next highest attention level was observed in the age group of 20-29 years old (31.39%), mainly comprising university students and young individuals in society who are interested in the “Law of the Standard Spoken and Written Chinese Language”. The attention level among the age group of ≤19 years old was 6.82%, primarily consisting of primary and secondary school students. The age group of 40-49 years old accounted for 18.15% of the total attention, while those aged 50 and above accounted for 6.14%. (Target Group Index (TGI) of 100 indicates an average level of attention; a TGI greater than 100 indicates a higher level of attention compared to the overall level). In terms of gender distribution, the TGI for females was 134.51, while for males it was 67.01. This indicates that females are more interested in the “Law of the Standard Spoken and Written Chinese Language” compared to males.

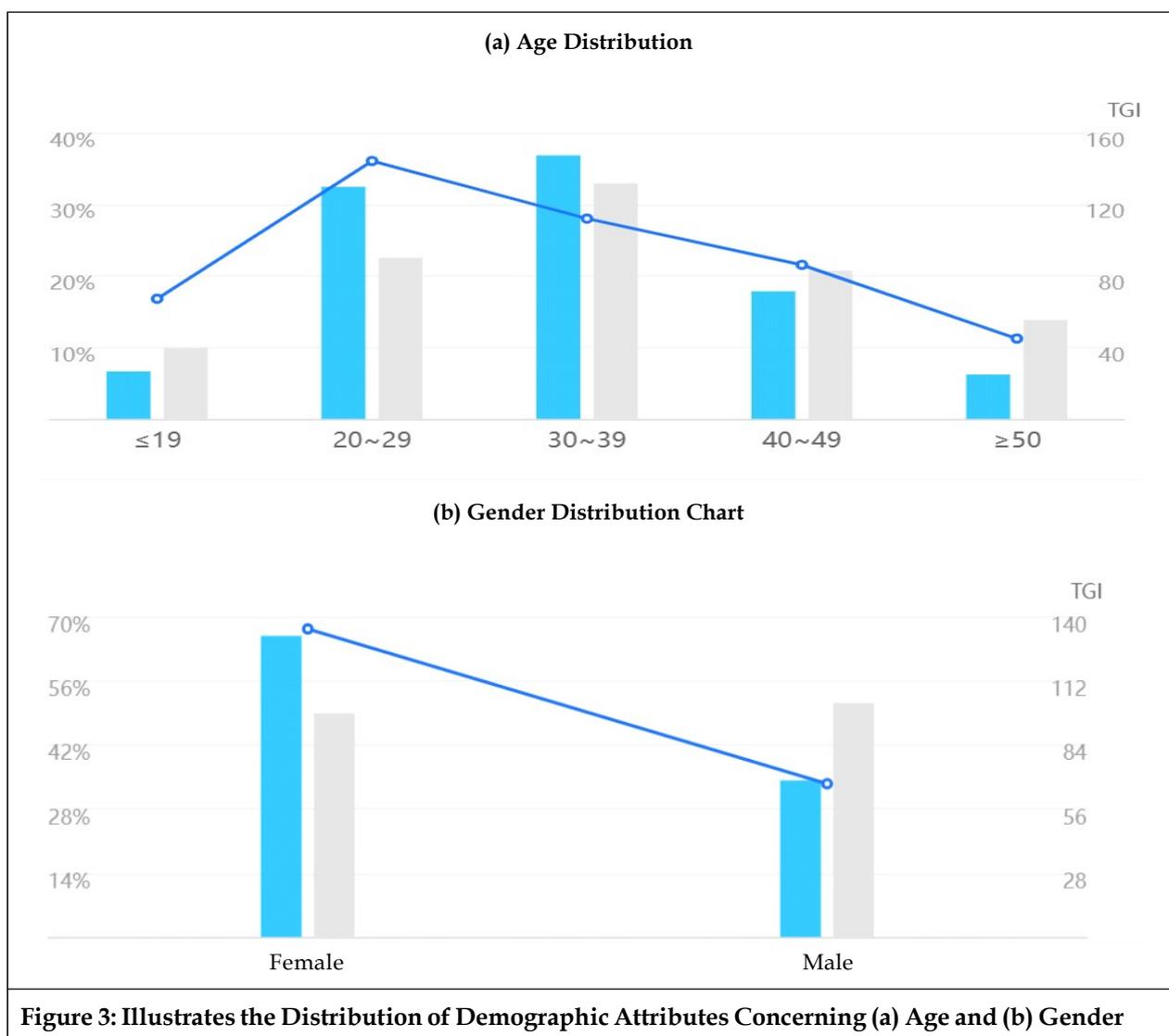


Figure 3: Illustrates the Distribution of Demographic Attributes Concerning (a) Age and (b) Gender

Furthermore, the study found that the search trends for both the “Law of the Standard Spoken and Written Chinese Language” and the “Law of the Standard Spoken and Written Chinese Language of the People’s Republic of China” were similar (Figure 4). However, the search index for the “Law of the Standard Spoken and Written Chinese Language of the People’s Republic of China” was higher than that of the former. This indicates that when the public conducts searches related to the “Law of the Standard Spoken and Written Chinese Language,” they tend to prefer using the full name “Law of the Standard Spoken and Written Chinese

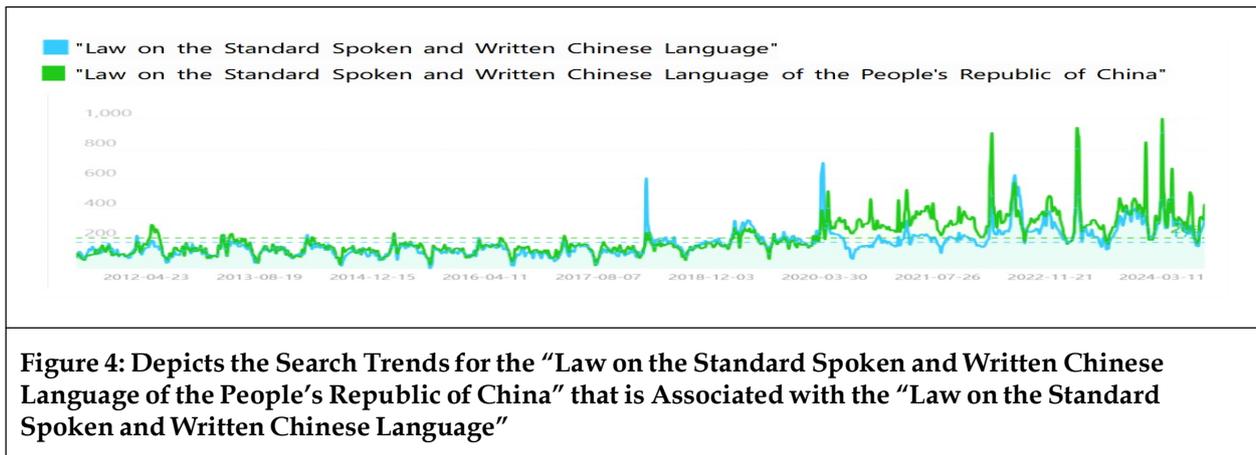


Figure 4: Depicts the Search Trends for the “Law on the Standard Spoken and Written Chinese Language of the People’s Republic of China” that is Associated with the “Law on the Standard Spoken and Written Chinese Language”

Language of the People’s Republic of China” as a keyword to accurately understand its relevant content. It also reflects the meticulousness of the public’s search behavior. The reason for this may be that the “Law of the Standard Spoken and Written Chinese Language of the People’s Republic of China” is promulgated by the state, which gives it authority and high recognition in the public’s perception.

This study systematically analyzed the spatiotemporal characteristics of public attention to the “Law of the Standard Spoken and Written Chinese Language” and its related term, the “Law of the Standard Spoken and Written Chinese Language of the People’s Republic of China.” This analysis not only helps interpret the public’s search behavior towards the national language and script law but also promotes the development of national language and script work. In the era of the Internet, the public’s search channels exhibit diverse characteristics, including Baidu Index, Google Search, Bing Search, WeChat, Weibo, and short videos. This study relied on Baidu Index to obtain data, which may still have limitations in fully revealing the extent of public attention to the national language and script law. Additionally, while Baidu Index can present the spatial and temporal distribution and characteristics of public search behavior (Tan *et al.*, 2022), it cannot reveal the underlying psychological patterns and other complex factors influencing this behavior. However, considering that Baidu users have a relatively high proportion among Chinese Internet users, Baidu Index can largely reflect the general opinions and thoughts of the majority of Chinese netizens. Analyzing the data on the “Law of the Standard Spoken and Written Chinese Language” displayed by Baidu Index, one part of the data may come from preschool and primary and secondary school teachers (including those in Xizang and Xinjiang), students, parents, university teachers, grassroots cadres, young and middle-aged workers, and individuals preparing to obtain a teaching qualification certificate. Another part of the data may come from the group engaged in the research of national language and script. However, we cannot precisely identify the specific group that truly needs to delve into the national language and script law. Therefore, the functionality of Baidu Index also needs further optimization and improvement.

5. Conclusion

Baidu Index, as a research tool, can effectively reveal the level of public attention towards the national language and script law. According to the research findings, it was observed that the search volume for the “Law of the Standard Spoken and Written Chinese Language” showed a significant decrease during the traditional Chinese festival, the Spring Festival, while it exhibited an upward trend during the National Mandarin Promotion and Propaganda Week in September each year or when relevant laws and regulations regarding the national language and script were issued. In terms of gender differences, females showed a relatively higher level of interest in the “Law of the Standard Spoken and Written Chinese Language.” It is worth mentioning that Xinjiang and Inner Mongolia, as ethnic regions, ranked first and second in terms of search volume nationwide. The search trends for the “Law of the Standard Spoken and Written Chinese Language of the People’s Republic of China” and the “Law of the Standard Spoken and Written Chinese Language” were generally consistent, but the former had a higher search volume. This indicates that the public tends to choose the full name “Law of the Standard Spoken and Written Chinese Language of the People’s Republic of China” for accurate retrieval.

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References

- Askitasklau, N., Artola, C., Pinto, F. *et al.* (2015). Can Internet Searches Forecast Tourism Inflows?. *International Journal of Manpower*, 36(1), 103-116.
- Baidu (2021, August 29). Explanation of Baidu Index. Retrieved March 22, 2024, from <http://index.baidu.com/v2/main/index.html#/help?Anchor=wmean>.
- Central Committee of the Communist Party of China, State Council (2021, March 22). Opinions on Achieving Effective Connection between Consolidating and Expanding the Achievements of Poverty Alleviation and Rural Revitalization. Retrieved March 22, 2024, from https://www.gov.cn/zhengce/2021-03/22/content_5594969.htm.
- Chen, L. (2021). On the Promotion and Popularization of National General Language and Writing in the New Era. *Journal of Shaanxi Normal University (Philosophy and Social Sciences Edition)*, 50(06), 164-174.
- Chen, X. and Liu, Y. (2022). National General Language and Writing Education for Adults: A Century Review and Shift of Era. *Journal of Ethnology*, (Z1), 20-29.
- China Internet Network Information Center (2023, August 28). The 52nd Statistical Report on the Development of China's Internet. Retrieved March 22, 2024, from <https://www.cnnic.net.cn/n4/2023/0828/c88-10829.html>.
- Dang, B. and Han, R. (2023). Policy Evolution, Practical Experience, and Optimization Strategy of National General Language and Writing Education in Ethnic Regions. *Ethnic Education Research*, 34(04), 144-153.
- Davidson, A.P. and Yu, Y.M. (2005). The Internet and the Occidental Tourist: An Analysis of Taiwan's Tourism Websites from the Perspective of Western Tourists. *Information Technology & Tourism*, 7(2), 91-102.
- Fang, X. and Wang, B. (2023). 30 Years of China's Internet: A Perspective of Netizen Profile - Rediscovering the Power and Source of Change of China's Internet Based on the Theory of Innovation Diffusion. *Media Observer*, (01), 60-72.
- Ginsberg, J., Mohebbi, M.H., Patel, R.S. *et al.* (2009). Detecting Influenza Epidemics Using Search Engine Query Data. *Nature*, 457(7232), 1012-1014.
- Gunter, U. and Oender, I. (2016). Forecasting City Arrivals with Google Analytics. *Annals of Tourism Research*, 61, 199-212.
- Huang, C. (2022). Research Dynamics of Promoting and Popularizing National General Language and Writing in Ethnic Regions in 2021. *Journal of Xizang Minzu University (Philosophy and Social Sciences Edition)*, 43(04), 99-105.
- Huang, X.K., Zhang, L.F. and Ding, Y.S. (2017). The Baidu Index: Uses in Predicting Tourism Flows: A Case Study of the Forbidden City. *Tourism Management*, 58, 301-306.
- Inner Mongolia Autonomous Region Education Department (2021, November 24). Notice on Issuing the "Outline of Mid- to Long-Term Reform and Development Plan for Language and Writing in Inner Mongolia Autonomous Region (2014-2020)". Retrieved October 12, 2023, from https://jyt.nmg.gov.cn/slh/jywj/202111/t20211124_1961024.html
- Jing, Q. (2008). Analysis of Traditional Festival Spring Festival and its Modern Significance. *Science Education Digest*, 1st Issue, (34), 232.
- Kang, Z. and Li, X. (2024). Research on the Prediction of Tourist Flow in Tian Shan Tian Chi Scenic Area Based on Baidu Index. *Vocational Technology*, 23(2), 99-108.

- Li, R. and Yang, C. (2023). High-Quality Development of National General Language and Writing Education in Ethnic Regions: Era Connotation, Transformation Features, and Implementation Path. *Ethnic Education Research*, 34(05), 159-167.
- Li, W. (2022). The Effectiveness, Experience, and Deepening of Language Poverty Alleviation in China. *Journal of South-Central University for Nationalities (Humanities and Social Sciences Edition)*, 42(8), 172-180+188.
- Li, W., Yang, G. and Li, X.N. (2021). Correlation Between PM2.5 Pollution and its Public Concern in China: Evidence from Baidu Index. *Journal of Cleaner Production*, (293), 126091.
- Li, Y., Huang, X., Wang, H. et al. (2018). Scholars' Discussion on "Poverty Alleviation Through Promoting Standard Spoken and Written Chinese Language". *Language Science*, 17(4), 356-367.
- Li, Z., Liu, T., Zhu, G. et al. (2017). Dengue Baidu Search Index Data Can Improve the Prediction of Local Dengue Epidemic: A Case Study in Guangzhou, China. *Plos Neglected Tropical Diseases*, 11(3), 1-13.
- Liu, J. and Li, M. (2023). Analysis of Public Fashion Attention Based on Baidu Index. *Journal of Beijing Institute of Fashion Technology (Natural Science Edition)*, 43(01), 89-97.
- Liu, P. (2022). Three Key Points for the Promotion and Popularization of National General Language and Writing in the New Stage. *Language Strategy Research*, 7(05), 8-9.
- Ministry of Education, National Language Commission (2017, March 15). Notice on Issuing the "Implementation Plan for the Popularization of National General Language and Writing". Retrieved March 22, 2024, from http://www.moe.gov.cn/srcsite/A18/s3129/201704/t20170401_301696.html.
- Ministry of Education, State Council Poverty Alleviation Office, National Language Commission (2018, January 19). Notice on Issuing the "Action Plan for Popularizing National General Language and Writing in Poverty Alleviation (2018-2020)". Retrieved March 22, 2024, from http://www.moe.gov.cn/srcsite/A18/s3129/201802/t20180226_327820.html.
- Moussa, F., Delhoumi, E. and Ouda, O.B. (2017). Stock Return and Volatility Reactions to Information Demand and Supply. *Research in International Business and Finance*, 39, 54-67.
- National Language and Writing Working Committee of the Ministry of Education (2012, December 10). Notice on Issuing the "Outline of Long-term Reform and Development Plan for National Language and Writing Work (2012-2020)". Retrieved March 22, 2024, from http://www.moe.gov.cn/srcsite/A18/s3127/s7072/201212/t20121210_146511.html.
- National Language and Writing Working Committee (2021). *Report on the Development of China's Language and Writing Work (2021)*. Beijing, The Commercial Press, 20.
- Pool, J. (1972). National Development and Language Diversity. In Fishman, A. (Ed.), *Advances in the Sociology of Language*, Vol. 2, The Hague, Mouton.
- Pu, E. (2023). Value and Path: Research on the Role of National General Language and Writing in Rural Revitalization in Ethnic Regions. *Journal of Sichuan Socialist College*, (03), 75-83.
- Qiu, L. and Li, H. (2018). Research on Social Public Opinion Based on Baidu Index. *Science and Technology Wind*, (33), 206.
- State Council (2021, October 20). Notice on Issuing the Outline for the Development of Chinese Women and Children. Retrieved March 22, 2024, from https://www.gov.cn/gongbao/content/2021/content_5643262.htm.
- Su, X. (2023). Rapid Progress and Remarkable Results in the Promotion and Popularization of National General Language and Writing. *Chinese Ethnic Education*, (06), 27-28.
- Tan, Q., He, F. and Teng, L. (2022). Using Baidu Index to Understand the Public Concern of Children's Mental Health in Mainland China in the Context of COVID-19 Epidemic. *Journal of Education, Health and Sport*, 10, 189-198.

- Wang, Q. (2023). Review and Prospect of the Promotion and Popularization of National General Language and Writing in Ethnic Regions. *Journal of Southwest Minzu University (Humanities and Social Sciences Edition)*, 44(07), 1-18.
- Wei, D. and Lei, W. (2022). Research on the Characteristics of Information Flow and Market Development Strategies of Ski Tourism in China: An Analysis Based on Baidu Index. *Journal of Beijing Sport University*, 45(7), 82-94.
- Wu, T. (2023, May 9). Promoting the High-Quality Development of National Fitness. *China Sports Daily*, (6).
- Xiao, F. (2024). From Ethnic Culture to Common Human Values: China's Spring Festival Going Global. *China News Release (Practical Edition)*, (02), 71-73.
- Yang, Q. (2020). Analysis of Search Behavior for Health Information Related to Epidemic Based on Baidu Index and Information Service Strategies. *Chinese Journal of Medical Library and Information Science*, 29(06), 28-34.
- Yang, X., Bing, P., Evans, J.A. *et al.* (2015). Forecasting Chinese Tourist Volume with Search Engine Data. *Tourism Management*, 46(Feb), 386-397.
- Yin, S., Duan, P. and Yin, P. (2022). Research on the Online Attention of 5A-Level Scenic Areas in China's Coastal Regions Based on Baidu Index. *Science, Technology and Industry*, 22(3), 196-201.
- Yuan, W. and Chen, X. (2023). The Development and Future Prospects of National General Language and Writing Education in China. *Chinese Ethnic Education*, (6), 22-26.
- Zeng, X. (2023). 'Three Zones and Three States': Significance, Major Difficulties, and Practical Paths for Promoting Mandarin. *Journal of Shaanxi Preschool Normal College*, 39(03), 118-124.