

# Public opinion of school reputation

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**Abstract:** With the rapid development of social media, public opinion has gradually become an important factor influencing school reputation, with platforms such as Weibo becoming primary channels for the dissemination of information. This study meticulously analyses the influence of public opinion on school reputation, exploring its dual nature and the central role social responsibility and ethical conduct play in shaping school reputation. Utilizing techniques such as text mining and sentiment analysis, we delve deep into the dynamic evolution of public opinion and its complex interaction with schools. The research highlights the essentiality for schools to continuously establish and maintain a positive image in crisis public relations and public opinion management. It proposes a comprehensive public opinion management strategy to guide schools in responding timely and appropriately during public opinion crises.

**Keywords:** public opinion, evolution, Shanghai

## 1. Introduction

In recent years, public opinion has emerged as an undeniable societal phenomenon, having a profound influence not only on individuals and organizations but directly affecting the reputation and social image of schools. [1]. Being vital centers for nurturing talents, schools regard their reputation as one of their most precious assets. However, in the current social backdrop, even a minor incident can potentially become the focus of public opinion, subsequently affecting a school's reputation. Therefore, understanding deeply the influence of public opinion on school reputation has become an urgent and vital topic. [2]

With the proliferation and advancement of social media, the speed and range of information dissemination have widened immensely. This scenario presents a series of challenges and opportunities, most prominently the undeniable impact of public opinion on school reputation. On one hand, negative public opinion can swiftly tarnish a school's reputation, leading to a trust crisis and even affecting admissions and donations. On the other hand, schools can leverage public opinion to sculpt and enhance their positive image, albeit necessitating high standards of social responsibility and ethical conduct.

For schools, grasping and controlling public opinion goes beyond just protecting their reputation; it is about elevating their stature and influence in society. [3] In this era of information explosion, a simple statement or picture can trigger extensive discussions and controversies in a short span. [4] Hence, it is imperative for schools to respond to public opinion events in a timely, accurate, and transparent manner to maintain their good reputation and public trust. [5]

This study aims to furnish a more comprehensive and in-depth understanding of the impact of public opinion on school reputation through the analysis in four dimensions: microblog data acquisition, text data cleansing and theme classification, comment text theme association, and public opinion theme evolution. Firstly, we collect and analyze data related to public opinion through microblog data acquisition. Next, through text data cleansing and theme classification, we extract and pinpoint the main themes of public opinion. Following this, we use comment text theme association to explore the connections and influences between different themes. Lastly, we depict the dynamic changes in public opinion by analyzing the evolution of public opinion themes.

The ultimate goal of this research is to provide schools with potent tools and strategies to better manage and control public opinion, thereby protecting and enhancing their reputation. Through this study,

we hope to offer schools a more scientific and practical approach to address and manage public opinion crises, allowing them to maintain stability and development amidst fierce competition in the educational market. [5]

### ***1.1. Data Extraction***

This section focuses on the problems and optimization methods in the process of obtaining and processing microblog data. The project we chose is the Scrapy project "weibosearch" in github, which obtains relatively comprehensive Weibo content and large amount of information, but there are some problems in practical applications, such as slow acquisition speed, inability to be accurate to hours or minutes, and a large amount of duplicate data when obtaining a large amount of data. Therefore, we have carried out a series of optimizations to improve the efficiency and accuracy of data acquisition, and also processed the acquired data to provide effective data for subsequent topic classification, correlation, and visualization.

### ***1.2. Summary of data***

This section focuses on the necessary filtering of the comments obtained in the extract section. Identifiers made through Python will contain @Content filtering removes identifiers to prevent interference with topic definition. Then, after comparing the singlepass and LDA models, the LDA model with better results was selected, and the comments were divided by the development time of time. Finally, the optimal number of titles is defined by the elbow method, and the themes of each period are extracted.

### ***1.3. Confirm the association relationship between child events***

In the tasks in this section, we aim to perform text association analysis, filter out highly similar text, and explore the association between texts. Therefore, we propose a correlation analysis method based on text similarity, and design the corresponding experimental process and evaluation indicators

### ***1.4. Subsequent evolution of events***

Regarding the drawing of the Sankey diagram, on the basis of using the LDA model to treat comments similarly, we integrate the obtained data, classify the sub-events shown in each comment, obtain the number of comments of each sub-event, and divide the number of sub-events by relative relationship to obtain the transfer rate between sub-events.

The main contributions of this paper include, but are not limited to:

- An association analysis method based on text similarity is proposed, which can accurately measure the similarity between texts.
- We designed and implemented an automated text processing and analysis tool to enhance the efficiency and accuracy of text relevance analysis.
- We have provided a scalable solution capable of handling large-scale text datasets and generating highly relevant text groups.

## **2. Societal Phenomenon(The Impact of Public Opinion on School Reputation)**

In today's society, public opinion has become an exceedingly important social phenomenon, exerting a profound influence on the reputation of educational institutions. Public opinion, which refers to the public's sentiments and judgments about a particular event, topic, or entity, can rapidly spread and have both positive and negative impacts on a school's reputation. This article will discuss the impact of public opinion on school reputations and examine this issue in the context of current societal trends.

Firstly, public opinion can have a direct impact on a school's reputation. When a school becomes embroiled in negative public opinion due to events such as campus violence, academic dishonesty, or conflicts between staff and students, these incidents often receive extensive media coverage, garnering widespread public attention. Such negative exposure can immediately damage the school's reputation, potentially leading to a loss of trust among parents and students, and even affecting crucial aspects like enrollment and donations.

A prominent trend in today's society is the rapid dissemination of information, facilitated by social media platforms such as Facebook, Twitter, and WeChat, which have become primary channels for the spread of public opinion. A false rumor or malicious comment can circulate across the internet within minutes, causing immeasurable harm to a school's reputation. Therefore, schools must prioritize crisis management, respond promptly, and rectify false information to mitigate the impact of negative public opinion.

Secondly, public opinion can indirectly influence a school's long-term reputation. In the age of social media, educational institutions are under continuous public scrutiny. The school's management, faculty quality, academic research, and social responsibility are all subject to scrutiny. If the school encounters issues in these areas, it can trigger discussions on social media, affecting the school's reputation.

In the current societal context, there is a growing emphasis on social responsibility and ethical behavior. If a school is implicated in scandals, misconduct, or discrimination, it can provoke strong reactions in public opinion, further harming the school's reputation. Therefore, schools must address these issues seriously, establish transparent systems, and adhere to ethical codes to ensure that their reputation remains intact.

In conclusion, public opinion has become a critical aspect of managing school reputations in today's society. Schools need to recognize the influence of public opinion, actively respond to and manage public opinion events, and establish transparent and trustworthy images. Only by doing so can schools maintain a stable reputation in the competitive education market and attract more students and supporters. The current societal landscape demands that schools excel not only in academics and educational quality but also in ethical behavior and social responsibility to protect and enhance their reputation.

### 3. Algorithm design

The flow of this program is based on four main tasks: "Microblog Data Acquisition", "Text Data Topic Extraction", "Text Data Topic Correlation", "Comment Text Topic Evolution", four parts of the main work is carried out. The final result of the program is a dynamic Sankey diagram of public opinion. By using our program, users can intuitively obtain the development of public opinion on social hot issues over time, so as to better intervene in the control of public opinion. The following describes the design ideas of the four parts of the program in turn:

- Weibo data collection.:

The Weibo data collection process utilized the Scrapy web scraping framework. Weibo acquisition part of the main solution to two problems: 1. a large number of duplicate data to increase the task 2. Weibo itself there are flaws in the search function. For the first problem, we use DuplicatesPipeline to filter duplicate data. We prevent data duplication by reading the existing csv file and adding new data, the old data still exists. The flaws of the Weibo search function are reflected in the fact that it is not possible to get all the relevant blogs in the case of a restricted search over a large time span. For example, in a search with a time span of one month, only ten tweets near the end of the time span are available. Therefore, we forcibly split the search time range to one day in case of a large time span, which reduces the efficiency of obtaining Weibo text, but effectively obtains more data and increases the accuracy of the analysis results.

- Text Data Cleaning and Topic Classification:

After getting the Weibo data you need to sort and clean the data. We use pandas library to process the csv file, and then use matplotlib for visualization. At the same time, we combined the official authenticated media Weibos classified by the LDA topic model as the basis for the time division of a large number of Weibo topics, so as to show the direction of public opinion topics in different time periods and at different stages of the development of the event.

In the further processing of the crawled data, we found some problems, such as malicious screen-scrambling, rubbing the heat and hanging tags, etc., which need to be deleted in advance in the part of the crawled data. In addition, due to the current prevalence of network terriers, the LDA model can't stop words correctly, so we add the function of special stop word library for general LDA model.

- Annotating Text Data for Entity Associations:

The comment topic association section we use TF-IDF to transform the comment content into a feature matrix to represent the feature vector of each comment. Then cosine\_similarity is used to calculate

the cosine similarity between comments in the TF-IDF feature matrix. We notice that there are many irrelevant textual data that add additional correlation branches, but actually have less correlation with hotspots. In order to make the subsequent evolution graph more concise and accurate, we simplify the similarity text pairs by merging the irrelevant grouping results and storing them in a single data frame.

- The Evolution of Public Opinion Themes:

We adopt the form of manual labeling to summarize and refine the comments on the same topic. Taking June 7, 2023 as an example, "A man was questioned about taking photos by a woman" hit the Weibo hot search list and triggered continuous attention and discussion, we summarize the hotspots of the development of public opinion on the incident as follows: the first stage is the beginning of public opinion (the woman posted that she was secretly photographed); the second stage consists of the media's first comments (reporting the incident), the official The first response (need to investigate) and netizens first comment (whether the dismissal, whether it can be forgiven, etc.); the third stage contains the media's second comment ("Needless" type of rights is not desirable), the official second response (Internet rumors are not official voice, very important and will be dealt with according to law) and netizens second comment (Sichuan university pretend to be dead, cyber violence, etc.). The fourth stage is the third official response (given probationary punishment), and the fifth stage is the third comment of netizens after seeing the punishment result (whether the result is reasonable, whether the result is serious, etc.). Based on the above summary we have drawn a dynamic Sangkey diagram.

#### 4. Conclusion

The influence of public opinion on a school's reputation has become an undeniable and critical issue in contemporary society. This phenomenon has triggered contemplation regarding reputation management, crisis public relations, and the dissemination of information through social media. From examining the impact of public opinion on a school's reputation, several profound insights can be drawn.

First and foremost, the astonishing speed at which public opinion can spread is truly remarkable. The advent of social media has empowered information to circulate globally within seconds. Irresponsible statements or dubious images can rapidly generate waves of controversy, causing significant harm to a school's reputation. This underscores the imperative for schools to remain vigilant at all times, promptly respond to emerging issues, and correct any misinformation to prevent the escalation of negative public sentiment.

Secondly, it is evident that public opinion's impact on a school's reputation is a double-edged sword. Public sentiment can either have detrimental effects on a school or potentially enhance its positive image. When a school demonstrates integrity, transparency, and responsibility during critical moments and proactively addresses issues, it can bolster public trust. This underscores the significance of consistently building a solid reputation, not only during crises but also through daily efforts to establish a positive image.

Thirdly, there is a growing emphasis on social responsibility and ethical conduct in today's society. Schools are now expected to excel not just in academics and educational quality but also in terms of societal responsibility and moral behavior. Any instances of misconduct or violations of ethical standards can incite public outrage and disdain, thereby causing harm to the school's reputation. Consequently, schools should maintain high ethical standards and actively engage in social responsibility initiatives to cultivate a favorable image.

Lastly, effective management of public opinion necessitates the presence of a professional team and well-devised strategies. When confronted with a public opinion crisis, schools should establish crisis management teams and formulate comprehensive response plans. These plans should encompass media management and public relations strategies. Importantly, these strategies should be prepared well in advance, even during periods of tranquility, to ensure a proficient response to unforeseen events.

In conclusion, the insights gained from the impact of public opinion on a school's reputation reveal both challenges and opportunities in the age of social media. Schools must maintain unwavering vigilance, establish an image of integrity, actively fulfill their social responsibilities, and concurrently develop crisis management mechanisms to protect and enhance their reputations. Above all, schools must acknowledge that reputation is a long-term endeavor requiring sustained effort and maintenance, not just reactive crisis management measures. [6]Only through such dedicated efforts can schools distinguish themselves in the fiercely competitive landscape of education and earn the trust and respect of students and society. [7]

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