



Research on the Emotion of " College Students ' Employment " Based on Online Reviews

Qiye Lin, Zhaoxia Zhang, Min Peng*

Guangzhou College of Commerce, Guangzhou, 511363, China

*Corresponding author's Email: 13986210591@139.com

Abstract. Through the analysis of online reviews on social networking platforms, we can show people's emotional tendency to " college students ' employment ", which is convenient to make correct employment guidance. This paper selects the online comments of the video related to the employment of college students after the epidemic in the B station as the research object, collects a total of 16782 comments, constructs the LDA model to extract the subject words, analyzes the emotional polarity, and obtains the emotional tendency of college students ' employment in the epidemic and after the epidemic.

Keywords: employment of college students; online reviews; LDA model; sentiment analysis

1 Introduction

The employment of college students is related to social stability and has received extensive attention. On June 19, 2024, the Ministry of Human Resources and Social Security, the Ministry of Education and the Ministry of Finance jointly issued the " Notice on Doing a Good Job in Employment and Entrepreneurship for Young People such as College Graduates, " and put forward 11 policy measures to fully promote the employment and entrepreneurship of young people such as college graduates. As we all know, during the epidemic period and two years after the end of the epidemic, the employment problem of college students is very prominent. In 2022, the employment rate of college students fell to 23.6 %, 57.6 % in 2023, and 2.1 % in 2024, only 55.5 %.

As an extremely important social work, the employment of college students is studied by many scholars from different angles. Liu Baozhong used large-scale social survey data from other institutions to study the employment willingness of college students ^[1]. Zhou Dong explored the employment culture of civil engineering majors by collecting online comments from a blogger on the video platform^[2].

Research on online reviews, through sentiment analysis, can dig out the emotional tendency of reviews, and then analyze people's emotional attitudes towards related topics. Therefore, some scholars use sentiment analysis as the main research method. Hou Yuxin analyzes the user comments of B station, and explores the user's views

and attitudes towards ChatGPT [3]. Lv Hongyu et al.analyzed the comments of employees on the enterprise, and excavated the emotional attitude of employees to the enterprise [4].

A number of studies have found that scholars mostly use objective data to study the related issues of " college students ' employment, " but few analyze the emotional tendency of " college students ' employment. " In the current information environment, online reviews of social networks can truly reflect people 's thoughts and social status. B station has the characteristics of wide knowledge field and young users, and often discusses the current social problems. Based on this, this paper will take the online review of B station as an example to study the emotional tendency of " college students ' employment ", and provide reference for the national college students ' employment related policy guidance and experts ' research on college students ' employment related issues.

2 Research Methods

2.1 Research Process

First of all, this paper uses Python to crawl the user 's comments on the video related to the employment of college students on the B site as the initial text and clean it. Then, the text is segmented by calling the Jieba library to form a text analysis library, and then the LDA model is used to extract the subject words. Finally, the rule function of the pysenti library is used to analyze the sentiment of the comment content, as shown in Figure 1.

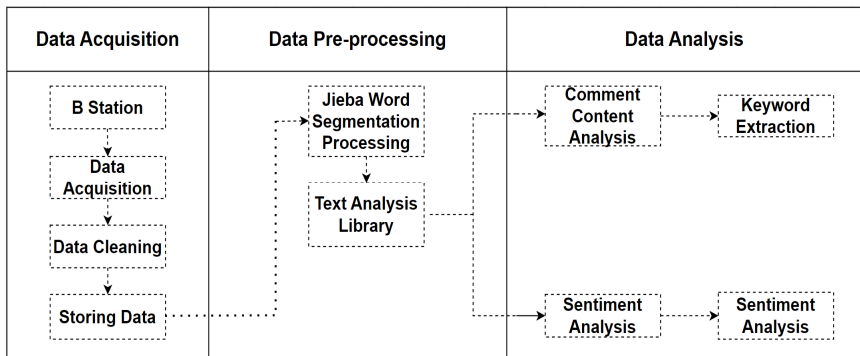


Fig. 1. Research process.

2.2 Data Source

B station video website online reviews as a data source. Taking " college students ' employment " and " fresh graduates ' employment " as keywords, the user 's comment text data under the college students ' employment-related videos during and after the

outbreak of the epidemic were collected. After removing invalid and duplicate data, a total of 16,782 valid data were collected.

3 "College Students' Employment " Comment Theme and Sentiment Analysis

3.1 Analysis of Subject Words

Extracting Keywords based on LDA Model.

LDA model is a topic model based on Bayesian model, also known as three-layer Bayesian probability model, which is composed of document layer, topic layer and feature word layer respectively. It can mine the hidden topic information of documents and enable users to quickly understand the information of documents [5].

In order to accurately extract the core subject words of the text, this paper uses the LDA model to analyze the text, and generates five sets of feature words for the three groups of texts, namely, the whole, the epidemic and the post-epidemic, and obtains five subject words through analysis and extraction. After finishing, as shown in Table 1.

It can be seen from the subject words " anxiety ", " mentality " and " communication " of college students ' employment during the epidemic that the amount of mobile information of students, parents and teachers during the epidemic has greatly increased, and the degree of mentality and anxiety are often deeply related to communication. Therefore, how to better communicate among the three parties has also become a challenge.

From the three words of " work, " " social environment " and " employment crisis " in the employment of college students after the epidemic, it can be seen that although the social environment is gradually recovering after the epidemic, due to the sharp increase in the number of job seekers, the employment competition is more intense, resulting in a situation of employment crisis.

Table 1. Subject words and corresponding feature words.

Time	Theme	Description	Feature Words
In the epidemic (2020.7-2022.12)	Theme 1	job-hunt	Interviews, Company, Professional, Wages, Jobs, Effort, Resumes, hr, Overtime, Materials
	Theme 2	social environ- ment	Peking University, Clever, 2021, Wages, 2020, Treatment, Undergraduate, Civil Servants, Brain Hole
	Theme 3	anxiety	Parents, Employment, Anxiety, Feelings, University, College Students, Learning, Children, Work
	Theme 4	mentality	Work, find, children, good health, 985,211, better
	Theme 5	communication	Interviewer, teacher, university, job, too hard, ic, get to know, graduate, embarrassed, feel
After the epidemic (2023.1-2024.7)	Theme 1	work	Jobs, Graduation, Employment, Wages, Profession, University, Blue Collar, College Students, Cannot Find, Enter the Factory

Theme 2	anxiety	Come on, statistics, average, growth, anxiety, maturity, back home, into the factory
Theme 3	social environment	Little, topic, interest, 26, generation, income
Theme 4	employment crisis	Suspicious, crisis, late, future generations, wisdom, exaggeration, group
Theme 5	feedback	Videos, Comments, Teachers, Times, Traffic

3.2 Sentiment Analysis

In order to understand the sentiment tendency of user comments, this paper analyzes the sentiment of the text by calling the pysenti library, and obtains the sentiment tendency of the text in the two stages of the epidemic and after the epidemic. Each comment has positive and negative ratings, known as emotional polarity. The sum of the two scores is 1. If the score of positive emotion is higher than that of negative emotion, the emotional tendency of the text is positive, and vice versa. In this paper, the following conclusions are obtained by sorting out the data in stages:

The emotional tendency scores of the two stages were calculated, which were during the epidemic and after the epidemic, respectively. As shown in Table 2, the emotional scores of the two stages were lower than the neutral value (0.5). The absolute value of the emotional score to the neutral value was 0.051 in the epidemic and 0.035 after the epidemic. It can be seen that the comment emotion presents a slightly negative attitude.

From the emotional scores of the text during and after the epidemic, it can be seen that both stages show a more negative tendency. It can be seen that the impact of the epidemic during the epidemic has made the social environment unstable, and after the epidemic, because of the sharp increase in the number of job seekers, the employment competition is fierce, so everyone is not optimistic about the employment of college students. Comparing the emotional scores of the two stages, it can be seen that the emotional score in the epidemic is lower than the emotional score after the epidemic, indicating that the epidemic containment has a greater impact on the employment of college students. However, according to the absolute value, the emotional tendencies of the two stages are close to neutral, indicating that everyone still has hope for college students' employment. If positive incentives can be made, the employment status of college students will be improved.

Table 2. Emotional score

	In the epidemic	After the epidemic
Emotional score	0.449	0.465
Average score		0.457
Emotional tendency		Negative

4 Conclusions and Inspiration

4.1 Conclusion

The purpose of this study is to conduct sentiment analysis on the comments of college students' employment-related videos on the social networking platform, and to reveal the emotional tendencies in user comments. This paper uses the LDA model to extract the subject words of the comments. In the epidemic, the flow of information among students, parents and teachers has increased, but their respective mentality and emotions will interact with the communication between them, which makes how to achieve good communication a challenge. After the epidemic, with the gradual unsealing of the society, the number of job seekers has increased sharply, the employment competition has become more intense, and the employment crisis has emerged.

According to the sentiment analysis research, the emotional score of this stage in the epidemic is 0.449, the emotional score of this stage after the epidemic is 0.465, and the overall emotional average score is 0.457. It can be seen that at any stage, users show a negative attitude towards college students' employment. However, the emotional tendency after the epidemic is more positive than that in the epidemic, which shows that there is still a positive emotional trend on the whole.

4.2 Inspiration

From the study of sentiment analysis, it can be found that the emotional score shows a relatively negative result, but by calculating the absolute value, it can be found that people still have hope for the employment of college students. Therefore, the government should make correct employment guidance in the society and improve the current employment environment for college students. Colleges and universities should also strengthen the employment education of college students, provide help for the employment of college students, and encourage students to find a variety of employment channels to reduce the slow employment rate.

Acknowledgement

Thanks for the supported Fund Project: The planning project of the China Private Education Association(CANFZG23105);Higher Education Research Project of the Guangdong Higher Education Association's (22GYB161);Guangdong Province Education Science Planning Project -Higher Education Special) (2022GXJK367);2024 University-level Quality Engineering Project of Guangzhou College of Commerce (Higher Education Teaching Reform) (2024JXGG45);2024 University-level Quality Engineering Project of Guangzhou College of Commerce (Higher Education Teaching Reform)(2024JXGG37)

Reference

1. Liu Baozhong, Zang Xiaosen. Diversification and Involution: Trend Analysis of College Students ' Employment Willingness (2015-2023) [J/OL]. Journal of Beijing University of Technology (Social Science Edition), 1-13[2024-07-12].
2. Zhou Dong. This paper analyzes the employment culture of civil engineering majors on the short video platform - - Taking the video review of ' Da Mengzi ym ' as an example [J]. Journal of College Counselors, 2024, 16(02): 80-85+99-100.
3. Hou Yuxin. Analysis of ChatGPT users ' online reviews based on topic sentiment - taking bilibili platform as an example [J]. Intelligence Exploration,2024,(03):47-55.
4. Lv Hongyu, Yang Jianlin. Research on employment industry information mining based on online reviews-Taking job seekers of library and information science as an example [J]. Information theory and practice, 2020, 43(09):63-71.
5. Chen Zhihui, Wu Keqing, Chen Jiachao, et al. Borrowing topic popularity prediction based on LDA and bidirectional GRU [J]. Software Guide, 2024, 23(07):51-57.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

