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Tutoring Systems Construction of Dynamic Early Warning Mechanism of Ideological and Political Education in Universities Based on Intelligent CAD

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Abstract. BD(big data) technology brings many new opportunities for the development of university IPE (ideological and political education), but it also inevitably brings many new challenges. Therefore, it is of great significance to establish and improve the dynamic early warning mechanism of students' IPE and to discover, analyze, and solve the problems in the process of students' management in time. The machine learning algorithm is the core of the final realization of online public opinion grading and early warning. Ensemble algorithms can well represent many complicated and thorny problems, so this study introduces the theory of ensemble algorithms according to the complex and changeable characteristics of network public opinion events. In this paper, the difference between each base classifier and the importance of each sample prediction is fully considered so as to change the distribution of samples in the training set and improve the classification accuracy and generalization performance of the second layer of meta-classifiers. The results show that in terms of accuracy, the accuracy of public opinion crisis names is as high as 91.25%. It provides theoretical support for BD to integrate into university IPE.

Keywords: Tutoring Systems; Ideological and political education; Tutoring Systems; Dynamic early warning
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1 INTRODUCTION

With the rapid development of modern information technology, especially the booming of mobile internet, social platforms, cloud computing, and Internet of Things technology, human society has entered the BD(big data) era. With the progress of technology, the size of data sets that meet the definition of BD will also increase with the passage of time. Also, different departments may define BD differently, depending on what software they usually use and how big the database of a particular industry is. The tide of the knowledge economy has brought unprecedented opportunities and

challenges to the development of universities, and at the same time, it has made the situation of university student management more complicated. All kinds of emergencies occur frequently in universities, which have an impact on society and the talent cultivation of universities [1]. Therefore, studying IPE (ideological and political education) in the BD era from the perspective of positive psychology, which is oriented to meet the development needs of students and centered on the cultivation of university talents, is conducive to solving the current problems.

With the rapid development of Internet technology, its rich functions are serving the public in all directions, and it has aroused the interest of the masses with its unprecedented effectiveness, massive information, and interactive communication. IPE can effectively prevent and deal with all kinds of unexpected events by raising awareness of crisis prevention and handling of the masses and their autonomy and enthusiasm. Improving the government's management flexibility can reduce losses and avoid unnecessary conflicts [2]. Due to the lack of systematicness, modernity, and pertinence, IPE can't stimulate the subjective initiative of the audience, so it can't play its due role in public crisis management. Traditional public opinion monitoring and analysis methods have made it difficult to meet the needs of emergency management, and with the deeper and deeper involvement of online public opinion in real society, the Internet has become a "mirror image" of real society [3]. During this period, if some netizens make false and negative remarks, it will easily lead to empathy and widespread indignation among public netizens, thus causing serious adverse effects and increasing the supervision difficulty of government departments.

The establishment of the dynamic early-warning mechanism of ideological and political education in colleges and universities plays a vital role in adapting to the educational needs of the information age, promoting the comprehensive and healthy development of students, maintaining the stability of the campus, improving the initiative and effectiveness of educational work, constructing the environment for educating all staff, coping with the challenges brought by social changes and strengthening the management of students' mental healthcare. Through this mechanism, colleges and universities can timely monitor and guide the ideological dynamics of students, take targeted measures, form long-term ideological and political education management, ensure that students form correct values and positive psychological states in the complex and changing social environment, and provide a solid guarantee for training new people who take on the great responsibility of national rejuvenation. BD urges students to change their lives and learning ideas. However, the traditional IPE theory can't meet the requirements of the BD era, and it can continue to play its role in promoting the mainstream values of students. The establishment and effective implementation of online IPE dynamic early warning mechanisms for college students can deeply understand the dynamic changes in college students' thoughts and timely and accurately discover the potential problems in their thoughts, lives, hearts, and other aspects. The research on the dynamic early warning mechanism of university IPE under BD background, combined with the new characteristics of the times, extends university IPE itself to the early warning mechanism, which is the expansion and deepening of IPE research. Optimize BD's resource allocation and internal and external environment so as to better realize the holistic and sustainable development of university IPE work in the BD era, and then promote its virtuous circle and improve the effectiveness of education.

Innovation of research:

(1)This paper introduces BD into the dynamic early-warning mechanism of university IPE, discusses the dynamic early-warning mechanism of university IPE on the basis of traditional IPE dynamic early-warning mechanism, and combines the new characteristics of the times so as to realize the innovative development of the dynamic early-warning mechanism of university IPE.

(2)A network public opinion early warning model based on an improved Stacking integrated algorithm is constructed. In this paper, the Stacking algorithm is introduced. In order to improve the prediction accuracy of the combined model, the difference of each base classifier and the importance of each sample prediction are fully considered.

The organizational structure of the paper:

The first chapter introduces the background work of the research. The second chapter mainly introduces the current situation of IPE research. The third chapter puts forward the implementation design of the IPE dynamic early warning mechanism. The fourth chapter verifies the performance of the model studied in this paper. The fifth chapter is the conclusion.

2 RELATED WORK

2.1 IPE-Related Research

The purpose of establishing the dynamic early-warning mechanism of college students' IPE is to prevent and correct extreme thoughts, eliminate crises, and promote students' all-round development. With the help of BD, implementing the dynamic early-warning mechanism of college students' IPE can realize the real-time process, the comprehensiveness of samples, the accuracy of results, and the convenience of operation. Moreover, this process runs through the whole process of IPE and is jointly managed by multi-level department staff, forming a pattern of all-round education for all staff.

Ferrucci and others pointed out that to cope with the opportunities and challenges faced by universities' IPE work in the BD era, it is necessary to strengthen BD awareness and BD application ability and improve BD technical support in universities' ideological and political work [4]. Li et al., based on the challenge brought by BD to university IPE, put forward that BD should be used to improve the quality of ideological and political work in three aspects: enhancing consciousness, strengthening ability, and ensuring the system [5]. Xu et al. discussed the basic theoretical problems of network IPE and affirmed the new opportunities brought by networks to college students' IPE [6]. Qiao et al. started with an analysis of the history and present situation of teacher education quality assurance and then identified the external and internal factors that affect teacher education. On the basis of scientific theoretical analysis, they analyzed the formation process of early warning mechanism of teacher education quality [7].

Zhao et al. pointed out that information collection is a key part of the BD application. If effective information can't be obtained in time, BD processing will stagnate, and university IPE work will not go smoothly [8]. Niu et al. pointed out: First of all, we should gradually establish and improve the data information management and utilization system [9]. Secondly, on the basis of inheriting the traditional work experience, university IPE workers should gradually explore and construct a complete standard process of data collection, management, and decision-making according to the actual work needs and development trends. Yang et al. also emphasized the necessity of establishing crisis emergency and handling systems in domestic universities [10]. Wu et al. concluded that IPE has three functions in emergencies: first, early warning; Second, the political guarantee and the guidance of public opinion; and Third, after-the-fact experience summary [11].

2.2 Social Early Warning and Group Event Early Warning

With the continuous growth of new media in the Internet age and the urgency of the research on online public opinion, online public opinion has become a hot spot of concern, and the definition of online public opinion in academic circles has become clear from the initial ambiguity. The Internet is

a virtual world where people can hide their identities and express their opinions freely. The Internet has become a space for people to vent their emotions daily. Internet users who have suffered hardships and failures in real life also use the Internet to vent their personal emotions and make false statements. The combination of the two is more likely to mislead the masses and cause a public opinion crisis.

Han et al., based on the network public opinion information dissemination mechanism, constructed the Weibo public opinion corpus, calculated the emotional intensity of blog posts through How Net and knowledge base, and proposed a Weibo public opinion rapid emergency response system based on Weibo case reasoning [12]. Liu et al. think that the key factors affecting the spread of online public opinion are mainly the media, netizens, public opinion leaders, political parties, and the government [13]. Acuna et al. used fuzzy Delphi method and fuzzy analytic hierarchy process to build a more matching public opinion early warning index system for specific hot topics, which improved the reliability and accuracy of the evaluation model [14]; Jones et al., based on the investigation and statistics of the speaker's opinions and speech bias of each public topic, pointed out that the corresponding analysis methods can be divided into three types: simple statistical method, machine learning method and fine-grained emotion correlation analysis method [15].

Zhang et al. think that to enhance the management level of public security, public security public opinion must be tapped through social media, and the evolution and distribution of public security public opinion must be evaluated in time through online public opinion [16]. Liu et al. put forward the "super network" opinion leader identification algorithm theory combining network topology analysis and text mining technology and researched and constructed a multi-dimensional super public opinion network model, which includes social development environment, psychological feeling environment, and opinion subnet [17]. Rosenkrantz et al. put forward the theory of value accumulation to explain group events, arguing that group events are the result of the superposition and interaction of various social factors, and their occurrence has a relatively certain process [18]. Carter et al. studied the characteristics of different stages of the public opinion life cycle for unexpected events, including the outbreak prediction in the latent stage, the supervision of negative speech in the diffusion stage, and the derivation of public opinion in the fading stage [19].

3 METHODOLOGY

3.1 Generation and Evolution of University IPE Under BD Background

Education is the source of rich knowledge, and BD is also the most widely used area, which will have an important impact on college student's daily life, learning methods, and thinking forms. The fundamental purpose of establishing the ideological and political early warning mechanism in universities is to accurately grasp the running situation, running process, and various influencing factors of universities' IPE and to provide forward-looking and guiding suggestions for universities to formulate policies. The networking of contemporary college students' thoughts and actions brings great convenience to the establishment of "BD" of college students, which in turn provides a new education channel for university IPE. Universities can use cloud computing technology to analyze, calculate, and integrate these data so as to achieve a comprehensive understanding of the educational objects.

While reshaping the environment of university IPE, the subject and object of university IPE have also undergone significant changes in the BD era. In terms of working style, the advantage of traditional classroom teaching supplemented by lectures lies in the effectiveness of the site, while in the BD era, the information received by students shows full coverage in space and all weather in time. BD has reshaped the social and cultural environment and changed the way of producing,

spreading, and consuming culture, and the cultural carriers and types also showed diversified characteristics [20]. Through collecting information on students' thoughts and behaviors, using quantitative technology to analyze the correlation of information, and further predicting the development of students' thoughts, the scientific management mechanism can deal with the deviation of college students' thoughts in time. Its main goal is to guide college students to establish correct ideas and observe correct behavior norms.

The necessary condition for the construction of a network public opinion early warning model is to give an early warning rating to public opinion events and give the original data a category label. The entropy weight method takes information entropy as the standard to determine the weight of indicators. The smaller the entropy value, the greater the dispersion of indicators, and the greater the impact of the indicators on comprehensive evaluation, the greater the given weight value. The specific definition formula of entropy value is:

$$e_j = -\sum_{i=1}^{n} p_{ij} \cdot \ln p_{ij} \tag{1}$$

Where $p_{ij} = \dfrac{d_{ij}}{\sum_{i=1}^{n} d_{ij}}$, $D = d_{ij}{}_{n\times m}$ is the original matrix, n is the event to be evaluated, and m is the evaluation feature.

The spreading mode of emergency public opinion on the Internet is similar to the spreading of diseases in human society. If the negative information in the spreading of public opinion on the Internet is compared to diseases, the spreading model of diseases can be used as a reference to construct the model of public opinion information spreading in complex networks.

In the real social environment, some people's infectious diseases conform to the SIS (Susceptible Infected Susceptible) model, such as influenza.

Assuming that $S\ t\ ,I\ t$ represents the proportion of susceptible population and infectious population in the total network, the differential equation of disease infection can be summarized by means of the mean-field method as follows:

$$\left.\begin{aligned} \frac{dS\ t}{dt} &= -\lambda I\ t\ S\ t\ + \gamma I\ t \\ \frac{dI\ t}{dt} &= \lambda I\ t\ S\ t\ - \gamma I\ t \\ S\ t\ + I\ t\ &= 1 \end{aligned}\right\} \tag{2}$$

Risk identification is the process of using a dictionary of public opinion crisis risk fields to mine the text features of accident hidden danger, screen the risk feature words, construct the risk expression, and visualize the basic risk information. The dictionary of public opinion crisis risk field refers to the collection of professional terms or expressions in the field of public opinion crisis risk, which contains information, concepts, and other elements in the field of public opinion crisis risk. Filter the wrong combination patterns to generate a dictionary of public opinion crisis risk fields, as shown in Figure 1.

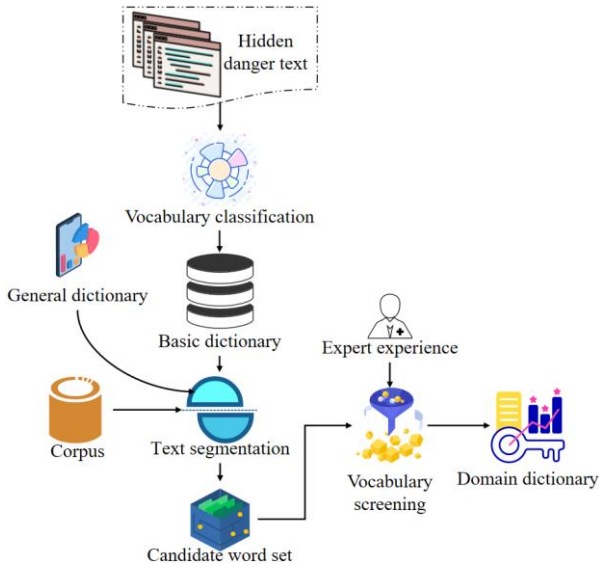

Figure 1: Construction process of dictionary of crisis risk field.

The maximum probability word segmentation combination of words in the crisis risk domain is not completely independent of obtaining domain candidates in a directed acyclic graph, and there is a prefix-based inclusion relationship. It is necessary to calculate the segmentation probability of each combination according to each domain candidate and take the maximum probability combination as the best segmentation method of the text. The segmentation probability expression is:

$$p\ w|s\ = \frac{p\ w\ p\ s|w}{p\ s} \tag{3}$$

Where w is the combination of segmentation, s is the text to be segmented, and $p\ w|s$ represents the probability that the text s is segmented in w mode; Because the text s is constant, then the value of $p\ s$ is constant, and the value of $p\ w|s$ is 1.

The coding category can format the coding content in order to improve the effectiveness of coding. This research and analysis category is compiled with reference to the research results of different researchers, with the purpose of finding all the effective information in the possible petition cases. Therefore, it is very important early warning information to investigate the attitude of the petitioner and whether the petition problem can be satisfactorily solved. Therefore, these two parts are added. Coding to the other two codings explains the standard and definition of coding.

In order to avoid misunderstanding coding standards by coders, the first two coders of formal coding will try coding until they are clear and proficient in coding requirements and standards. In this study, the Pearson coefficient is used to examine the coding reliability of petition cases. The formula is as follows:

$$r = \frac{1}{N} * \sum z_x z_y \tag{4}$$

In which z_x is the standard score of the x variable and z_y is the standard score of the y variable.

The establishment of a risk assessment grading model based on BD should also be based on the risk management theory of safety science, and the risk assessment grading model based on BD should be established from three dimensions: the possibility, severity, and sensitivity of hidden danger evolving into an accident. The mathematical model is:

$$R = f\ P,L,S \tag{5}$$

3.2 Constructing IPE Dynamic Early Warning Mechanism

The grid mechanism of ideological education in universities establishes the management mechanism by establishing the digital platform of university IPE information, and each individual student is used as a grid unit to establish information accounts. On this basis, it is divided into students, classes, colleges, schools, and other levels. By using the re-classification function and information account of the grid, the school can not only communicate directly with students but also get information in time. Information feedback can also be carried out through colleges and classes so that problems can be solved timely and accurately. Using a grid mechanism not only realizes the sharing of information but also realizes the action coordination of various actors. The data collected and analyzed by the comprehensive information platform is classified and then transmitted to the supervision and evaluation center, the work execution center, and the comprehensive execution force, providing information support for their work.

Under the background of BD, the early warning mechanism has more opportunities and faces more challenges. The use of BD provides a quantitative dimension for the IPE field. BD can accurately predict students' ideological trends, correct bad trends in the process of university IPE in a timely manner, and avoid the occurrence or spread of various crisis events. Second, we should learn BD and pay attention to its use. The related information of IPE objects is recorded by various social platforms with which the university cooperates, so the BD sharing platform or BD sharing integration system includes two parts: campus data sharing integration system and school-enterprise data sharing integration system. Therefore, it is necessary to continuously improve BD integration technology, promote the efficiency of data collection and screening, improve the efficiency of data processing, and realize the timeliness of the early warning mechanism.

In this paper, the difference between each base classifier and the importance of each sample prediction are fully considered so as to change the distribution of samples in the training set and improve the classification accuracy and generalization performance of the second layer of meta-classifiers. The improved Stacking algorithm is shown in Figure 2 below.

According to the previous method, the $n*m$ dimension feature vector c_{n*m} can be obtained for these m weak classifiers with different qualities, and the correct proportion of predicted categories of a single sample time-base classifier is counted as hp_i:

$$hp_i = \frac{hf_i}{m} \tag{6}$$

Where m represents the number of base classifiers, and hf_i means the correct number of the i-th sample predicted by m base classifiers.

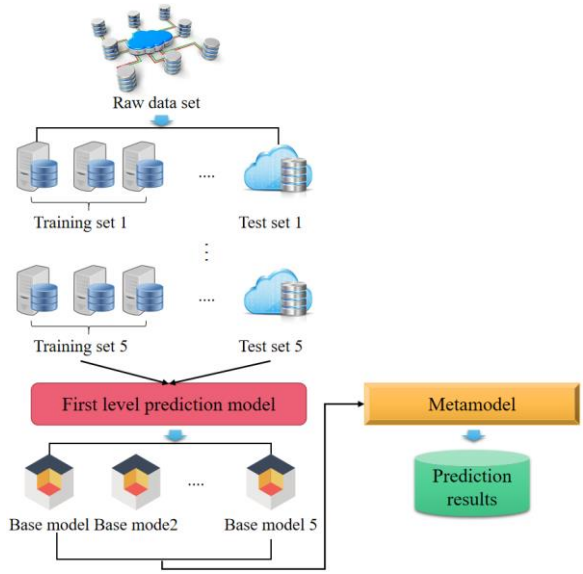

Figure 2: Improved Staking algorithm.

In general, the greater the degree of a subject in the network, it means that the subject is the key node of the network, which is more important for the network analysis. However, this paper shows that the subject plays an important role in the dissemination of public opinion.

In a complex network, the number of nodes i that must pass through among all the shortest paths in the whole network space is represented by B_i, that is:

$$B_i = \sum_{m,n} \frac{g_{\min}}{g_{mn}} \qquad m,n \neq i, m \neq n \tag{7}$$

In this formula, g_{mn} represents the shortest path number between nodes m,n, while $g_{\min}$ represents the shortest path number between nodes m,n that must pass through node i, and the betweenness of each node in the network represents the influence of that node in the complex network.

The construction principle of the model has two aspects: first, the growth mechanism, that is, the described network is regarded as an open network, and the network scale will change with time; Second, the preferred connection, the new network nodes tend to connect the nodes with greater influence.

When a new node joins the network, it will give priority to the node with a higher connection degree; that is, the connection possibility is proportional to the degree k_i of the node i:

$$\prod_i = \frac{k_i}{\sum_j k_j} \tag{8}$$

Under the traditional support-confidence framework, increasing the assessment of risk balance can reduce the impact of unbalanced data on rules. In this paper, Kulc measurement and IR (Imbalance Ratio) are mainly added.

See formula (9) for the definition of Kulc measurement evaluation:

$$Kulc\ A,B = \frac{1}{2}\ P\ A\middle|B\ + P\ B\middle|A \tag{9}$$

The measurement formula can be regarded as the average of two conditional probabilities, and the formula results are only related to A,B and $A \cup B$, thus avoiding the influence of the total number of risks and the number of safety inspection activities.

See formula (10) for the definition of IR:

$$IR\ A,B = \frac{\left\| \mathrm{Sup}\ A - \mathrm{Sup}\ B \right\|}{\mathrm{Sup}\ A + \mathrm{Sup}\ B - \mathrm{Sup}\ A \cup B} \tag{10}$$

This index reflects the degree of imbalance between the two risks. The closer the frequency is, the smaller the value of the imbalance ratio will be. When the frequency is equal, the imbalance ratio will be 0.

4 EXPERIMENT AND RESULTS

In the process of integrating BD with university IPE, we must strengthen the cultivation of a humanistic spirit. Find out their crisis and confusion immediately, provide them with care and help at the spiritual level, intervene in time for those with mental disorders, provide psychological counseling and help, and so on. In the BD era, where everything can be digitized, it is necessary for the educated to quickly process all the complex data around them. However, different kinds of data, especially fragmented data, divide the time of college students. Therefore, this means that the cultivation of data literacy of IPE teachers at BD Times University will suffer from the interference of fragmented data.

In order to test the early warning model obtained in this study, the real group events are selected for pre-analysis of group event early warning. In the study, 60% of the samples were randomly selected as training samples and 40% as testing samples. All data in the sample are valid, and there are no excluded data. Common experiences and feelings, stimulating public events, etc., are input into the neural network, the expected value of letters and visits is input into the dependent variable, the hidden layer uses an exponential function, and the input layer uses the identity function.

All data are converted into observation and prediction charts and residual analysis charts (Figures 3 and 4). From the two scatter charts, the error between the expected value and the output value of neural network analysis is very small, and the simulation model is good.

It is necessary to fully understand the actual situation of the public crisis and select the best political education method in order to overcome the public crisis more effectively. On the one hand, it is necessary to educate the public systematically on ideological and political theory; on the other hand, it is necessary to organize the public to participate in relevant practical activities in a planned way. Through comparative analysis, we can find solutions to achieve high quality and best results from various ways and angles. In the process of training, we constantly compare and analyze the implementation of the standards and the difficulties encountered, and constantly improve all kinds

of places that fail to meet the professional standards and curriculum standards in the process of talent training, and constantly improve the talent training program.

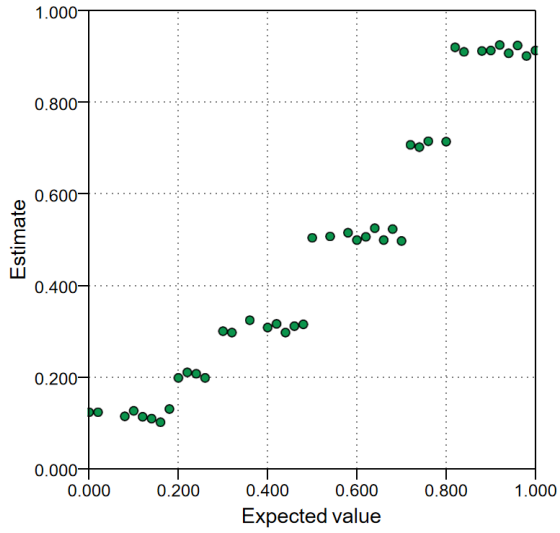

Figure 3: Observation forecast chart.

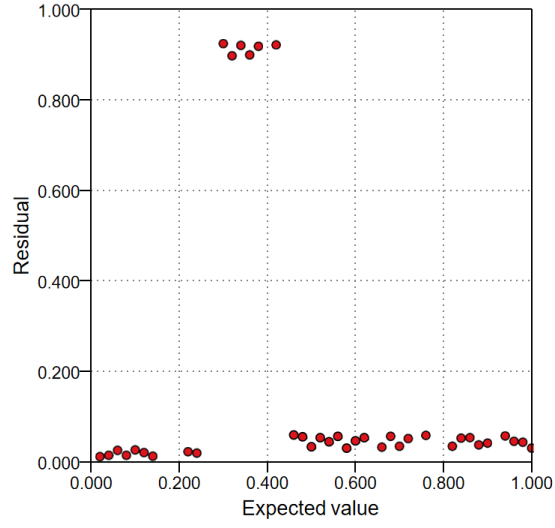

Figure 4: Residual analysis diagram.

Risk identification accuracy is the core factor that affects the analysis effect of historical data. Accurate risk identification is beneficial to improve the quality of risk early warning information. To verify the accuracy of risk factor identification based on the domain dictionary, a Chinese word segmentation evaluation index system is introduced, including accuracy, Recall, and F-measure to make statistical analysis on the constructed basic information database. The accuracy, recall, and comprehensive performance index values of nominal terms of public opinion crisis are shown in Figure 5.

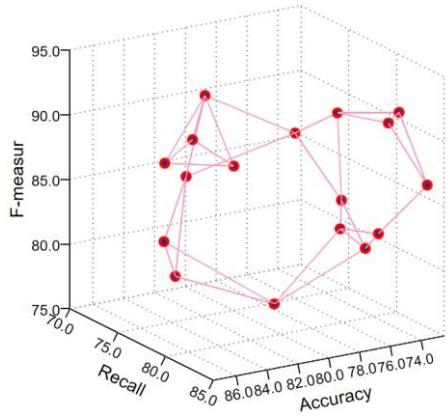

Figure 5: Word recognition in the crisis field

In terms of accuracy, the accuracy rate of public opinion crisis names is as high as 91.25%, which indicates that the risk factor identification method based on the domain dictionary has an excellent identification effect on public opinion crisis nouns. In the absence of relevant domain vocabulary, the phenomenon of over-segmentation is easy to occur in the recognition of unknown words, but with the expansion of domain dictionaries, this kind of problem will gradually decrease.

With the increase of minimum support threshold, the frequency of risk warnings decreases, and correspondingly, the warning accuracy increases step by step, but the increasing trend tends to be gentle. In this simulation, the average warning accuracy is up to about 80.21%. Calculate the standard deviation of early warning accuracy in Table 1 and Table 2. The standard deviation of early warning accuracy shows an increasing trend, indicating that the frequency of early warning gradually decreases with the increase of support threshold.

Support degree	Risk warning frequency		
	5%	10%	15%
10	29	27	13
20	31	25	16
30	34	21	12
40	27	22	13
50	26	22	12
60	27	23	14
70	38	25	16

Table 1: Risk warning frequency.

Support degree	Risk warning accuracy		
	5%	10%	15%
10	88.859	78.86	82.305
20	82.327	97.655	98.43
30	83.659	82.95	76.414
40	79.381	80.24	88.554
50	75.291	88.041	89.013
60	78.217	77.227	83.634
70	78.881	84.394	92.196

Table 2: Risk accuracy.

The SIS model can be used to describe the spread of most infectious diseases among people. In this paper, a "scale-free network" is used to construct Internet space. For a scale-free network, the degree of each node distributed in the power law function has no measurable characteristic scale, so the uneven distribution characteristics of each node degree should be comprehensively considered in practice.

For the direct immune SIS model in scale-free networks, the nodes in the susceptible state are directly connected with the nodes in the latent state. The numerical values of standard SIS and SIS models with direct immunization rates can be obtained by computer simulation. As shown in Figure 6, the evolution diagram of the standard SIS propagation model on the scale-free network is shown, and Fig. 7 shows the evolution diagram of the SIS propagation model with a direct immunization rate on a scale-free network.

With the passage of time, the proportion of vulnerable people in the whole communication network decreases to a short-term increase with the advancement of evolution time and finally tends to a stable state. When the system reaches a steady state, in the SIS model with a direct immunization rate, latent people and infected people have a smaller proportion in the network, which shows that organizing some potential communication nodes through human activities can effectively reduce the communication efficiency of public opinion on the network.

The IPE content of the BD era is timely, novel, and concise. To some extent, the characteristics of IPE communication content benefit from convenient communication tools. In the process of communication, intelligent mobile micro-devices represented by mobile phones have become the platform for university IPE to work. To promote the smooth development of university IPE, researchers and workers urgently need innovative theories and methods. Combine this with school social media to enhance the social responsibility of the media and release high-quality information so that the educated can receive the subtle dissemination of mainstream ideological content from schools and media during the process of watching news and browsing websites.

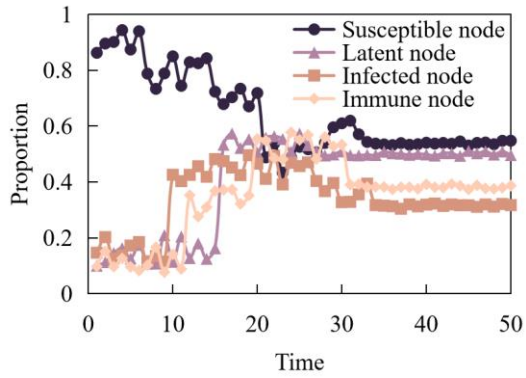

Figure 6: Evolution diagram of standard SIS propagation model on scale-free network.

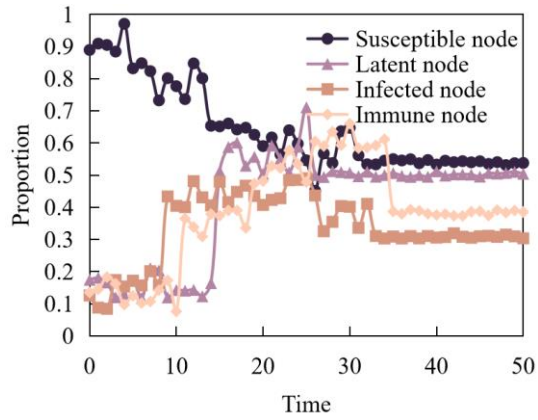

Figure 7: Evolution diagram of SIS propagation model with direct immunization rate on a scale-free network.

To be sure, the application of BD technology will definitely increase the number of appearances of virtual space, and the lack of attractiveness of mainstream ideological information will eventually become the root of the crisis. The negative impact of BD technology is also reflected in the fact that non-mainstream ideological information has caused a huge impact on the university IPE environment. Therefore, in order to maximize efficiency and strengthen functions, the dynamic IPE early-warning mechanism for college students must pay attention to the universal connection between things. Specifically, it is necessary to build a set of linkage mechanisms to ensure the internal components of the early-warning mechanism and the mutual connection between the early-warning mechanism and other mechanisms. In order to achieve the purpose of early warning and ensure the effective operation of the early warning mechanism, we must realize the benign operation of the linkage mechanism.

5 CONCLUSIONS

The establishment of the dynamic early-warning mechanism for the healthcare of ideological and political education in colleges and universities reflects the deep concern for students' physical and mental healthcare. By comprehensively monitoring students' thoughts and psychological states, the

mechanism pays attention not only to students' political attitudes and values but also to their emotions, pressures, and psychological needs. By identifying students' needs and problems in ideological and political education in a timely manner, the early warning mechanism can take positive measures, such as mental healthcare education, psychological counseling services, and stress management guidance, to promote students' mental resilience and emotional healthcare. In addition, the mechanism strengthens the synergy of school, family, and society to create a supportive environment for students to grow up and help them cope with the challenges they may face in their studies, relationships, and future planning. Such all-round care and early warning measures aim to cultivate students' positive psychological qualities, enhance their sense of self-worth and social responsibility, and ensure their healthcare growth and all-round development under the guidance of ideological and political education.

Under the background of BD, great changes have taken place in the objective environment, educational subject, object, and carrier of university IPE, and the work of university IPE is facing great challenges. This determines that the dynamic early warning mechanism of college students' network IPE has become a subject worthy of great attention and in-depth study by IPE workers. Risk identification is to use the dictionary of public opinion crisis risk field to mine the text features of hidden accidents, screen the risk feature words, and then construct the risk expression. From a structural point of view, we can mine the data to learn from each other's strong points and get more accurate prediction results. In this paper, the algorithm fully considers the difference between each base classifier and the importance of each sample prediction so as to change the distribution of the training set samples to improve the classification accuracy and generalization performance of the second layer meta-classifier. In terms of accuracy, the accuracy rate of public opinion crisis names is as high as 91.25%, which indicates that the risk factor identification method based on the domain dictionary has an excellent identification effect on public opinion crisis nouns.

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