A MENTAL HEALTH EDUCATION STRATEGY BASED ON ONLINE VIDEOS

Baoxian Jia[1], Wunong Zhang[2]*

Abstract

To protect the mental health of college students, this paper proposes two methods based on online videos, namely, the accurate mental health education (AMHE) method and the personalized mental health education (PMHE) method. The AMHE analyzes the sequence and frequency of the access to category pages in the search for online videos, determines the categories of the videos watched by college students, and extracts the keywords from students' reviews on online videos. The PMHE examines the mental health problems of college students through data mining and big data analysis: the improved association rules algorithm is used to mine the access logs of online videos, the frequently accessed knowledge points are identified to determine the students' interests, and the relationship between knowledge points and interests is ascertained. The two methods were combined into a mental health education strategy, capable of adjusting the teaching contents flexibly and providing students with personalized services. This research sheds new light on the design of mental health education courses and the improvement of students' mental health.

***Key words:** Mental Health Education Method, Online Video Review, Personalized Service, Big Data.*

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INTRODUCTION

Online video media, like TV stations, form their own industrial chain and integrate with the international industrial chain, which is also a trend of future development. Nowadays, with the advancement of the times, new media represented by mobile phones and computers are also developing rapidly. (Wilkinson, Ang, & Goh, 2008) proposed new media usually having the characteristics of fast information dissemination and fast information update, which can bring events happening around the world. For a time, through the spread of social software, the realization of the "global village." Therefore, with the development and progress of society, the popularity of new media is also constantly improving. More and more people communicate and communicate through new media, which greatly promotes the dissemination of information.

The Internet has expanded the horizons of college teachers and students. The unique openness of the Internet can systematically summarize the mental health education resources in the world. This aspect can effectively enrich the teaching resources of college mental health education courses, and on the other hand, it can help to expand the horizons of college teachers and students. Mental health teachers can query relevant educational knowledge through the Internet, and watch lectures by mental health experts at home and abroad to enrich their knowledge reserves and improve the teaching efficiency of mental health education courses. Second, it helps to enhance the pertinence of mental health education. The unique virtual nature of the Internet can help college students to eliminate doubts and wariness, communicate with teachers in a timely manner, and teachers can formulate corresponding guidance programs according to the feedback of students, thereby improving the pertinence of mental health education courses.

[1]*Liaocheng University, Liaocheng 252059, China.* [2]*Henan University, Henan 475001, China.*
E-Mail: zhwn@henu.edu.cn

ADVANTAGES OF COMPUTER ONLINE VIDEO TECHNOLOGY AND RELATED INFORMATION TECHNOLOGY

Vision is an important way for learners to receive information, so video resources become an important resource for autonomous learning in an open network environment. At present, video resources such as video open classes, micro-courses, and MOOCs are in the ascendant, and other video learning resources on the Internet are growing at an alarming rate. In the vast video resources, learners are extremely easy to find information in resource search. Faced with the contradiction between the huge increase in resources and the inefficient access.

Cluster analysis can cluster visitors with similar characteristics from Web access information data. In the Web transaction log, clustering visitor information or data items can facilitate the development and design of future service models and service groups. At present, the data we conduct for Web data mining mainly comes from the log files recorded by the server, which records the access behavior of all users for a period of time. However, there is a lot of noise in the network log data. Therefore, when collecting the user's access path data, we need to convert the original log file into the data format required by the mining algorithm through data purification, user identification and session identification.

After the data is processed, we can get the collection of pages that the user visits each time the video is searched, and arrange the collection of pages in chronological order to form a sequence. With the continuous advancement of network technology, the application in the field of education is becoming more and more popular. The video on demand system based on B/S architecture has been widely used in university network platforms and distance education systems; the service business of digital TV and 5G communication is also growing. It provides a wider application space for VOD on-demand system; the rise and development of MOOCs also promotes the advancement of VOD technology, greatly expands the way people acquire knowledge, facilitates online learning, and accelerates the construction of lifelong learning system.

The research uses Web data mining technology to extract the information needed from the user session file, analyzes the sequence and frequency of the user accessing the category page during the process of finding the video, and calculates and outputs the video and its target classification that need to be adjusted by the optimized algorithm. Reasonable intelligent video categorization method enables users' willingness to be reflected in the VOD video classification process, and optimizes the VOD site structure, which not only reduces the workload of VOD site management, but also saves network overhead and running burden. Improve the efficiency of users' querying videos, let learners easily and efficiently digest information in the vast amount of learning information resources, embody the learner's individualized learning and personalized growth. (Maloshonok & Terentev, 2016) realized the intelligent management of online video learning resources for the emerging MOOCs. (Chen, Zhou, & Chiu, 2013) provided reference for VOD on-demand system to play a greater role in remote open learning and online learning, and have a place in building a lifelong learning society.

First, you can use the multimedia classroom to conduct Internet teaching. Teachers can use the computer teaching equipment of colleges and universities to use the Internet to assist teaching. In addition, teachers can also send mental health education courses to the group through the network through the creation of mental health communication groups, requiring students to use their spare time to complete the learning tasks and expand communication in the classroom. Of course, teachers can also use these new media to communicate online with students and pay attention to students' mental health status in a timely manner. This aspect is conducive to building a harmonious and harmonious teacher-student relationship. On the other hand, it also helps to strengthen the teaching of mental health curriculum. Sex. (Bockting, Miner, Romine et al., 2013) share mental health knowledge on these online platforms to help students improve their mental health knowledge system.

PRECISE EDUCATION METHOD BASED ON ONLINE VIDEO TECHNOLOGY TO COMMENT ON EMOTIONAL COLLECTION

With the growth of online video, more and more people are beginning to post comments on videos on video sites. These comments often have a user's personal emotional color and some key

information in the video, which has a significant impact on the video viewing decisions of web users. How to automatically classify and extract keywords from online video reviews has become an urgent problem to be solved. (Pennington, Socher, & Manning, 2014) focused on the emotional classification technology of online video reviews, and analyzes the effects of different feature extraction and feature selection methods and different classification algorithms on the accuracy of online video commentary sentiment classification. (Wang, Sun, Ma et al., 2014) Sentiment classification: the contribution of ensemble learning. Decision Support Systems, 57, 77-93. Simulation experiments show that the online video commentary sentiment classification model proposed by the paper has high accuracy. For college management, you can also make full use of the emotions of "micro-content". (Zhang, Zheng, & Zheng, 2018) Emotion can reflect the personality and psychological state of the reviewer, so the school can grasp the psychological situation of the students in time, grasp the dynamics of the students in time, and is conducive to the student management work in colleges and universities.

In the comparative sentence recognition experiment based on CR sentiment dictionary, the Python crawler mental health online video website is used to crawl popular comments, and after preprocessing and data cleaning, the training set corpus and test set corpus are formed, which respectively contain 1000 corpora. The experiment

was verified experimentally from the accuracy of comparative sentence recognition, positive recall rate and negative recall rate.

In this experiment, the CR sentiment vocabulary was used to identify the comparative corpus of the labeled categories, and based on the 2000 comments that were marked, the CR sentiment vocabulary was used to identify the experimental results with the comparative sentences of the unused vocabulary. analyses and compare. The experimental results based on the CR sentiment vocabulary are shown in Table 1. The results of the comparison of the recognition sentences for the use of the CR sentiment vocabulary are analyzed and compared. The comparison results are shown in Table 2.

Analysis of experimental results: In the comparison sentence recognition based on the traditional classification model, the classification accuracy rate is the lowest when the combination related to the comparison result appears as the feature item for comparative sentence recognition. After using the CR sentiment vocabulary, the accuracy rate is significantly higher than that of the comparative sentence recognition without using the CR sentiment vocabulary.

It can be seen from Table 1 and Table 2 that this experiment only considers the feature item recognition comparison sentence related to the comparison result, and uses the constructed CR emotion vocabulary to perform comparative sentence recognition based on the traditional

Table 1. **Comparison of recognition performance between two types of comparative sentences**

	Emotionless Dictionary CR	Emotional Vocabulary
Overall accuracy	67.45%	78.90%
Positive recall rate	17.45%	6.85%
Negative recall rate	74.70%	92.59%
Unrecognized corpus	59	40

Table 2. **Comparison of recognition accuracy of comparative sentences based on CR sentiment vocabulary**

Accuracy%						Number of feature items				
Feature item	5	10	20	30	50	Feature item	5	10	20	30	50
J	76.4	73.5	57.6	54.4	53.7	KBJ	70.1	69.6	69.5	69.2	69.4
ZJ	76.9	72.6	78.4	71.6	71.6	DBJ	63.6	61.7	60.5	59.6	59.7
KJ	76.9	73.3	56.6	52.6	41.5	KDJ	69.8	68.3	67.9	68.2	68.9
BJ	71.3	64.9	65.6	62.7	66.4	ZKDJ	67.7	67.4	67.6	68.4	69.1
ZKJ	71.7	67.7	66.5	68.3	67.6	ZKBJ	68.3	68.3	67.7	67.2	67.5
ZDJ	69.7	69.6	68.4	67.5	66.2	ZDBJ	66.4	63.3	66.3	62.4	62.6
ZBJ	69.3	68.5	66.6	68.4	65.6	KDBJ	63.9	63.6	64.4	62.3	61.4
Accuracy rate increment	6.25	6.31	6.09	6.37	6.11	ZKDBJ	63.4	56.9	50.8	68.4	65.6

classification model, and the accuracy rate is reached. 75.90%. Compared with the comparison sentence recognition based on the traditional classification model, the accuracy rate has been greatly improved.

As can be seen from Table 1, the recognition accuracy and negative recall rate of the comparative sentences are higher than when the CR sentiment vocabulary is not used. When the CR sentiment vocabulary was not used, the overall accuracy rate was 65.45%, the positive recall rate was 17.45%, the negative recall rate was 78.90%, and the unrecognized corpus number was 59. When using the CR sentiment vocabulary, the overall accuracy was 75.9. %, the positive recall rate is 6.85%, the negative recall rate is 92.59%, and the number of unrecognized corpora is at least 30. It can be seen from the experimental analysis that with the constructed CR sentiment dictionary, the accuracy of comparative sentence recognition is improved by 10%, and the number of unrecognized corpora is reduced by 26. Therefore, the comparative results sentiment vocabulary proposed in this paper can have higher availability in comparative sentence recognition, which can improve the accuracy of comparing the result as a feature word for comparative sentence recognition.

PERSONALIZED MENTAL HEALTH CURRICULUM RECOMMENDATION METHOD BASED ON DATA MINING

Big data application

Since the advent of the media era, everyone is an important communicator and audience in the media. The social platforms behind WeChat, Weibo, and everyone have hidden huge commercial value. With the community and the circle, there is a topic. If you have a topic, you can know the interesting orientation of people, and you can use the right medicine to create the most original program. This is followed by high clicks, high ratings and high returns. Therefore, as long as the major online video media is moving towards such a marketing idea, it will not be blindly led by the audience, but will trace the media industry chain with commercial value.

The development of the new media era is inseparable from the development of the Internet. (Feng, Zhou, Xu et al., 2018) show that most people's consumption platforms are mobile phone clients at present, especially in the popularization and promotion of 4G networks today, a large number of groups have 4G services. In the future, online media will also have to consider the development of 4G terminals as their own cooperation direction. This is an opportunity and a challenge.

Now that we know that people's spending habits are in the mobile terminal in the future, we must first increase its industrial chain before opening up this service. Only by constantly improving the industrial chain of mobile terminals can we get closer to people's living and consumption habits and find more business opportunities. We can open up and improve some sections that are close to life, such as financial news, entertainment news, people's livelihood news, etc., and even develop to serve the life, such as buying movie tickets online. The development of these network-derived services will be the main force in the future to increase other value-added services for online video sites. Therefore, in the future, we need to use technology to make new media operations and marketing into a brand, and achieve a win-win situation in content operation and brand strategy.

Secondly, teachers should use the online innovative mental health education curriculum teaching method. (Nguyen, DiVerdi, Hertzmann et al., 2017) Video is a video taken with virtual reality technology, and its effect is as we see it in reality. Teachers can adopt the online teaching method according to the actual conditions of the school. Teachers can strengthen communication with college students through WeChat, Weibo, forums, etc., and set up exchange groups, upload and share texts, videos and pictures in the group, and encourage students to actively discuss and communicate. When encountering problems, teachers should promptly intervene to give guidance and help. This aspect can help to enhance the flexibility and interest of mental health education curriculum teaching, stimulate students' interest in learning, and on the other hand, it can enhance the era of mental health education curriculum teaching, and prompt college students to keep abreast of the latest mental health knowledge. Finally, teachers can also take the teaching method of teaching students in accordance with their aptitude. College students have certain differences in their life experience, hobbies, and personality characteristics. Therefore, their mental health education courses have different learning needs. Teachers should understand the students'

professional knowledge and life background according to the Internet, and then develop targeted Sexual teaching, for example, for marketing majors, can focus on consumer psychology, while tourism management students can focus on tourism psychology. This will greatly enhance the enthusiasm of students to participate.

(Ferguson, 2016). Strengthening the synergy of carriers and building a comprehensive education mechanism Whether it is new media or old media, it has different advantages and disadvantages. If colleges and universities want to strengthen their mental health education through new media, they must combine the advantages of new and old media. Make full use of multiple media to form the synergy effect of multiple media. On this basis, colleges and universities should also strengthen the relationship between parents and colleges and universities, and realize the mental health education model of family, school and society.

Mental health personalized course recommendation

The personalized curriculum recommendation module is implemented, and the recommendation technology based on collaborative filtering is mainly used to recommend a suitable course for each learner. In order to recommend personalized knowledge content for each learner in the e-learning platform, the first thing to do is to have a certain understanding of each learner's personality preferences and learning abilities, and cluster the learners based on this information. Analyze, divide into different clusters, and then find the learners with the highest degree of matching with the target learners in the same cluster, and then recommend the next course to the target learners based on their experience and historical records. (Xu, Jia, Li et al., 2013) designed intelligent retrieval system based on brain science for personalized study recommendation service which improved the accuracy and efficiency (Jonathan, Herlocker, Konstan et al., 2017).

Collaborative filtering: In order to determine which courses to recommend to the target learner,

the collaborative filtering process needs to be completed as follows: Find the cluster in which the target learner is located. If the target learner is an old user, you can analyze the course of interest based on some basic information such as his or her study history and professional code, and then recommend it. If the target scholar is a new user, then according to the learner, when designing a questionnaire, it is necessary to fill in some information such as the professional code and the knowledge content of interest, and then carry out the information with the learners in different clusters. Match, according to the principle of the greatest similarity, find the same cluster as the target learner, and then proceed to the next recommendation service. (Jia, Huang, & Jiao, 2018) designed semantic similarity calculation algorithm based on knowledge graph for personalized study recommendation service which improved the accuracy and efficiency of recommendation.

Learner preferences and interactive data acquisition. To get the learner's interest in a course can be started from the following two aspects: If the learner customizes the mental health course in the online teaching platform, the learner is interested in the course; The learner's access log is analyzed to obtain the learner's historical browsing history and evaluation information of the course. There are two forms of feedback from learners on the course, one is obvious and the other is implicit. The displayed evaluation is easy to obtain and can be obtained by the learner's evaluation score for the course. The higher the evaluation score, the more popular the course is. On the contrary, it proves that the learner's interest in this course is not high. This approach is straightforward, but needs to be obtained in a form similar to a questionnaire. This requires the learner to first do a questionnaire when filling out the platform registration, fill in his hobbies and other information, and then the personalized recommendation system will help. Implied evaluation information is usually displayed directly. (Mahdavi, Chehreghani, Abolhassani et al., 2008). hide it in this information by mining and analyzing the browsing time and learning time of

Table 3. **Network curriculum**

Course Number	Course Name	Subject Category	Class Attribute	Title Subject	Course Teacher	Opening Date
CourseID	Title	Subject	Class	Attribute	Teacher	Date

Table 4. **Appraiser's evaluation information form for the course**

	2013204465	2012204303	2012204304	2012204305	2013204497
Course _101	0	1	2	1	0
Course _102	5	0	1	2	5
Course _103	3	2	1	0	3
Course _104	1	5	4	3	1
Course _105	5	3	5	4	?

each course, the website's access log, and the learner's customized records. Data mining has valuable information or rules. Either explicit evaluation information or implicit evaluation information can be mapped to an evaluation record table. Table 4 is a simplified example.

CONCLUSION

All in all, today's society is a society guided by science and technology. Su (2003) show that optimizing mental health education must be carried out effectively under the application of new media, but the new media is also a double-edged sword, not only for today's college students' mental health education. It brings new opportunities and brings new challenges. Therefore, relevant mental health educators should make rational use of new media technologies and build a comprehensive education mechanism by strengthening their skills and qualities.

People's lifestyles are changing, the environment of the times is changing, and their content, channels, and technical means must always keep pace with the times (Lee & Lee, 2015). In the context of the era of the new media era, online video media should fully integrate its own advantages, and carry out the whole process, processing and re-creation of resources. In this way, we can make full use of it and form our own industrial chain, so that we can always be invincible. We look forward to the future efforts of online video media, generations of media people, to bring us more surprises and discoveries.

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