

## Research on Psychological Counsel in the View of College Ideological and Political Education Based on Data Mining

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**Keywords:** Data mining, Ideological and political education, Psychological counsel

**Abstract:** China is still in a special period of change. The various contradictions and pressures generated by society are actually inevitable in all universities and colleges. At present, the psychological problems of college students have gradually become more serious, which has aroused the attention of people at all levels of the society. Therefore, it is not possible to delay or perfunctory in the psychological education of college students. At the same time, it also faces major challenges in ideological education. When teachers are grooming students' bad psychology, they need to adopt different methods according to specific cases to guide students to learn psychological methods.

### 1. Introduction

In order to improve their education level, we must fully understand and study the role and significance of psychological counseling in college education, understand the deficiencies in psychological counseling, and propose improvements. The two major problems addressed by psychological counseling are self-improvement and performance improvement. For psychological counseling, the two major problems are behavior correction and psychological assistance. In fact, the purpose of psychological counseling and ideological and political education in universities is the same. The basic role of psychological counseling is through psychological counseling, so that the sufferer can overcome the psychological barriers, improve the level of thinking, correct and establish the correct view of the three, so as to achieve the individual's comprehensive development and achieve its own value (Jayasinghe, 2007). The purpose of ideological and political education is also to change people's thinking, fade their erroneous ideological cognition, improve their own ideological consciousness, and have excellent ideological qualities. It can be seen that the purpose of the two is not only the same, but also the processing methods are extremely similar. Therefore, the work of psychological counseling can be said to be based on ideological and political education in colleges and universities. The value of psychological counseling is manifold. For the value of educators, first of all, they can improve their psychological quality in the process of psychological counseling. Second, they must complete the change of work concepts (Proctor, 2001). At the same time, they must also improve the educators' own work innovation and practical ability. For the value of the educated, the psychological counseling work to solve their psychological problems in work, study and life, but also to help them achieve their own psychological counseling needs, thereby enhancing their ability to solve their own psychological problems.

Psychological grooming is a scientific and effective teaching method in the political education in universities. Although it has been widely used, it also has its shortcomings. Due to the influence of traditional ideas, the concept of humanistic education in ideological education in our country is in a state of deficiency. Educators do not pay enough attention to the correctness of the minds of the educated, the good solution to the psychological problems, and the development of the attitude and psychology (Peterson & Flanders, 2002). Furthermore, the deep-seated problems of undergraduates cannot be solved well. Traditional teaching pays more attention to people's political status and understanding position, so the education of students is mainly instilled. Healthy psychology is an important prerequisite for college students to receive ideological and political education and learn

scientific and cultural knowledge (Truzyan & Nune, 2014). It is an important issue that relates to the quality of new talents training and economic development and national construction. It is an important part of the university's ideological and political education to carry out network ideological and political education with the campus network, a new education carrier that young college students are willing to accept. The official opening and continuous development of the campus network has promoted the development of the information of university ideological and political education. However, the construction of most university network ideological and political education systems is still at a preliminary stage of development. There is a real problem that the function of network ideological and political education is weakened due to unclear positioning of functions. This article attempts to introduce the concept of psychological counseling into the construction of university network ideological and political education system (Webb, 2011). Learning from and using ideological and political pedagogy, psychology and other multi-disciplinary knowledge, adhere to the combination of theory and practice, and put forward a preliminary idea of constructing a psychological counseling network ideological and political education system.

## 2. The connotation of psychological counseling

### 2.1. Sampling methods

Guidance is the purpose and the ultimate goal of clearing. The psychological counsel in ideological and political education means that ideological and political educators follow the rules of the formation and development of people's ideological activities. Psychological counsel is based on the respect of university students' status as the main body, and communicates with the college students to understand the concerns and confusion of the university students (Warters, 1955). And use the knowledge and methods of psychology to unblock and guide college students' thoughts and emotions so as to solve the psychological problems. In the process of psychological counsel, ideological and political educators can better understand students' psychological problems by communicating with students on an equal basis, grasp the causes of psychological problems, and then find ways to solve problems. Most traditional ideological and political education methods focus on indoctrination education. It not only ignores the student's main status, but also can't satisfy the students' actual needs. It often leads to the unsatisfactory effect of the ideological and political education in colleges and universities. The psychological counsel is to help psychologically distressed students psychologically adjust through ideological and political educators and students through careful communication and good interaction. Introducing psychological counsel into ideological and political education can not only bring new ways and methods to ideological and political work in universities, but also bring new ideas for ideological and political education in colleges and universities so as to improve the effectiveness of ideological and political education.

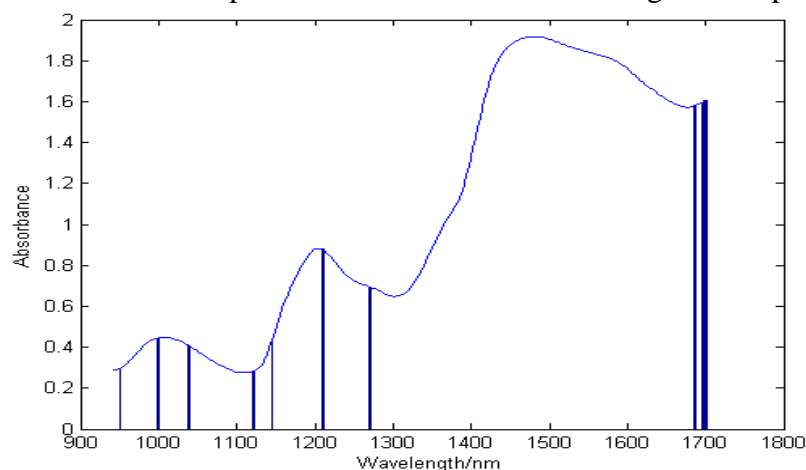


Figure 1. SPA wavelength selection method selected wavelength diagram

## 2.2. Ways to achieve psychological counsel in ideological and political education

Teachers are the main body of ideological and political education in colleges and universities. Creating a high-quality ideological and political education teacher team is an important guarantee for the realization of psychological mediated ideological and political education in the new era. To achieve psychological counsel in the ideological and political education in colleges and universities naturally cannot do without a high quality ideological and political work teacher team as a guarantee. However, due to the deeper secretiveness of human psychology, the emergence of psychological crisis has certain potential. This has caused many psychological problems to be discovered only when it develops beyond control. Therefore, in the work of ideological and political education in colleges and universities to do a good job of psychological counsel, not only rely on teachers, but also rely on college students themselves, especially to cultivate the ability of college students to learn their own psychological counsel. This requires colleges and universities to pay attention to college students' psychological health education. In addition, besides paying attention to students' psychological problems, it is more important to pay attention to the cultivation of students' good psychological qualities. At the same time, because different students have different personality traits, not all students will actively seek out a psychological teacher or a class teacher when they encounter psychological problems. On the contrary, for most college students, they are not used to getting rid of psychological distress in this way. Therefore, colleges and universities in the ideological and political education work in the implementation of psychological counsel should respect the students' individual differences. In the face of the increasingly prominent mental health problems of college students and the limitations of traditional ideological and political education methods, how to improve the ideological and political education in colleges and universities has become an urgent task for ideological and political education workers in universities.

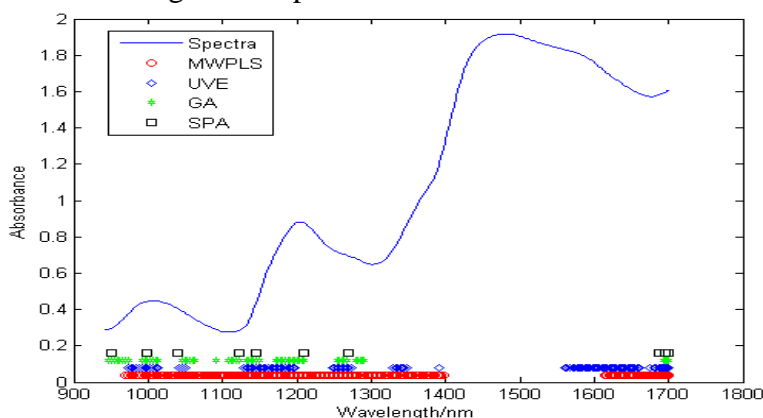


Figure 2. Four variable selection methods to select wavelength comparison chart

## 3. The role of psychological counseling

### 3.1. The path selection of using psychological counseling in ideological and political education

In addition to the weak theoretical basis of psychological counseling, there are disadvantages of its relatively simple teaching methods. The current methods of psychological counseling education cannot be solved according to the characteristics of the psychological problems of the educated people, because they are mainly lecture-style education and are not targeted. Although ideological and political morality is important, it is more important to recognize the psychological characteristics of students. Therefore, the psychological counseling in ideological and political education should focus on the solution of all aspects of psychological problems and psychological barriers to college students, and help them establish a correct view. In this complex society, students' psychology is extremely vulnerable. Therefore, colleges and universities must not only pay attention to the mental health of educators, but also promote the concept of psychological counseling. Therefore, colleges and universities must establish the concept of psychological counseling, and give appropriate guidance to educators, so that they have an objective

understanding of psychological counseling. And as a concept of education, in order to improve their overall quality. Paying attention to humane care and psychological counseling is the inevitable requirement for strengthening and improving ideological and political education in colleges and universities in the new period. It is an important mission of ideological and political education in universities to actively explore the countermeasures of humanistic concern and psychological counseling in ideological and political education in colleges and universities. In terms of humanistic care and psychological counseling in colleges and universities, we must explore innovations in humanistic care and psychological counseling, and work hard on the concepts of education, methods of education, and management models to develop a new situation in ideological and political education in colleges and universities.

We can create a linear model:

$$y = b_1x_1 + b_2x_2 + \cdots + b_mx_m + e \quad (1)$$

$$y = \sum_{j=1}^m b_jx_j + e \quad (2)$$

$$y = xb + e \quad (3)$$

There are three situations:

$$y_1 = Xb_1 + e \quad (4)$$

We can write them as two linear equations:

$$y_2 = Xb_2 + e \quad (5)$$

Assume that a training data set on a feature space is given:

$$I(s_1, s_2, \dots, s_m) = -\sum_{i=1}^m p_i \log_2(p_i) \quad (6)$$

The formula is:

$$E(X) = \sum_{j=1}^v \frac{s_{1j} + \dots + s_{mj}}{s} I(s_{1j}, \dots, s_{mj}) \quad (7)$$

The information gain function is:

$$I(s_{1j}, \dots, s_{mj}) = -\sum_{i=1}^m p_{ij} \log_2(p_{ij}) \quad (8)$$

The information gain function tends to produce large function values for those tests that may produce multiple branches:

$$A(X) = \frac{Gain(X)}{I(s_1, s_2, \dots, s_v)} \quad (9)$$

Get a decision tree with the smallest expected error rate:

$$Gain(X) = I(s_1, s_2, \dots, s_m) - E(X) \quad (10)$$

Edge function:

$$mg(x, y) = av_k I(h_k(x) = y) - \max_{j \neq y} av_k I(h_k(x) = j) \quad (11)$$

1) Common psychological problems: the implementation of humanistic concern and

psychological counseling in college ideological and political education requires the guidance of educational theory and the renewal of educational ideas. This requires us to change our thinking, optimize our ideas, and enhance the effectiveness of humanistic care and psychological counseling in ideological and political work in universities. At present, the development of humanistic care and psychological counseling in ideological and political education in colleges and universities cannot fully meet the actual psychological demands of educated people, and their effectiveness is not strong. We need to differentiate innovative psychological counseling methods and techniques for individuals, build a joint system of humanistic care and psychological counseling, and enhance the effectiveness of ideological and political education.

2) Ways to achieve psychological counseling: China's higher education has transformed from elite education to popular education, and the number of university students has rapidly increased. Related facilities and conditions cannot keep up, resulting in college students' ideological and political education has become more and more complex. The construction of suitable humanistic care and psychological counseling management model also becomes more and more urgent. Ideological and political education in colleges and universities shoulders the dual roles of education and management. However, due to various reasons, the educational function of ideological and political education is more reflected in the daily organization and management, so ideological and political educators have become the administrators of students.

### 3.2. Research tools and methods

Establishing the evaluation system of ideological and political education in colleges and universities is the key to the integration of ideological and political education in colleges and universities. However, the current evaluation system for ideological and political education in colleges and universities is still not perfect. In practice, it is still an exam-oriented education model and does not form a complete system. Outstanding performance in the emphasis on educating light and moral education, re-evaluating educated people, and stressing the neglect of teachers in several aspects, such an evaluation system has greatly weakened the effectiveness of college students' ideological and political education.

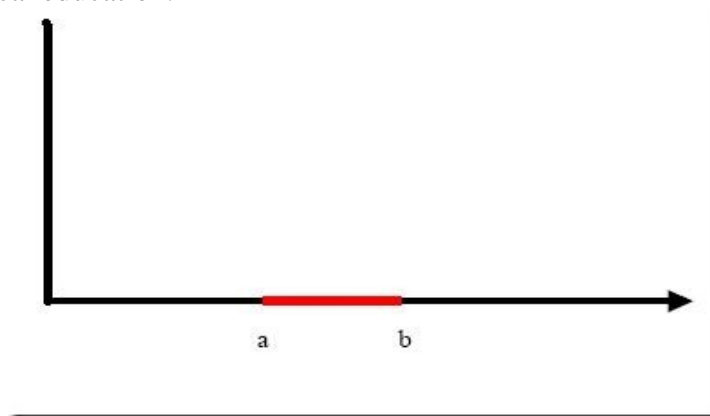


Figure 3. Classification problem in two-dimensional plane

### 3.3. Pay attention to psychological counseling in college ideological and political education is a realistic need

If we want to improve the effectiveness of psychological counseling, we must improve the level of psychological counseling for educators, and stress the methods and techniques of grooming. This is the aspect that university teachers need to upgrade. Modern ideological and political education is a new kind of comprehensive application discipline with practical characteristics, which has a strong guiding significance for modern ideological and political education practice. Faced with the influence of many ideological trends brought about by the reform and opening up, the conflict between college students' personal thinking and social ideology has become increasingly acute. In the work of ideological and political education, efforts are made to promote the healthy development of college students' psychological quality through psychological counseling. This can

promote the formation of affinity for ideological and political education among college students and, accordingly, promote the development of modern ideological and political education. The application of psychological grooming methods in the work of ideological and political education in colleges and universities fully demonstrates the ideological and political education demands of respecting individual development.

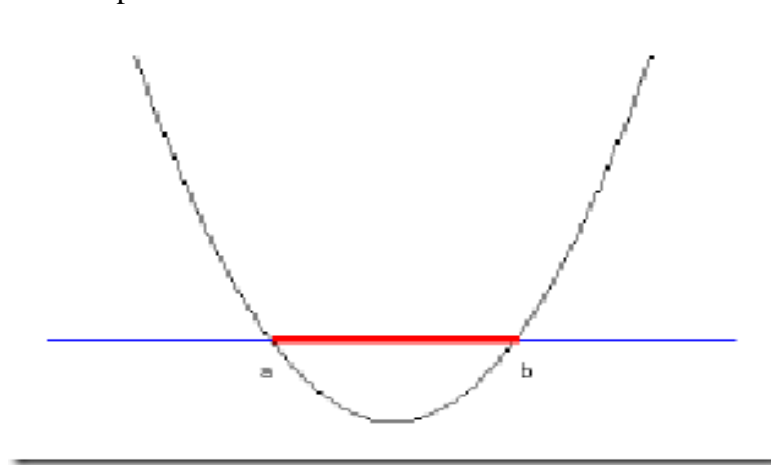


Figure 4. Function linear graph

In the view of the development of modern ideological and political education discipline, we should pay attention to meeting the psychological needs and spiritual needs of educated people. Ideological and political education must not only consider the development of ideological and political education from a single political perspective, but also systematically analyze and comprehensively consider the development issues facing modern ideological and political education from the perspectives of psychology and spiritual dynamics. Practice has proved that the convergence of ideological and political education and the individual psychological needs of educated individuals is in line with the development direction of modern ideological and political education and also meets the requirements for the scientific development and innovative development of ideological and political education in universities.

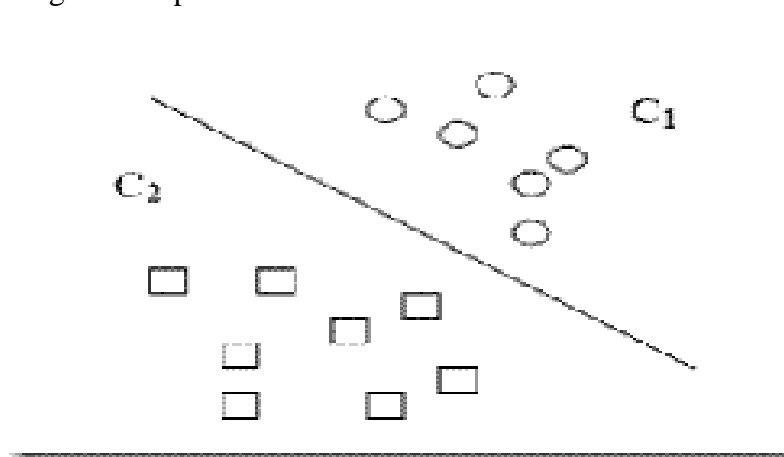


Figure 5. Linear classifier

## 4. Empirical analysis

### 4.1. Strengthen psychological counseling

As the main characteristics of the modern era, new media is the key to solving the path of past humanistic care. The ideological and political education activities in the current era use new media as media to improve the passive status of former educators through multiple forms of information dissemination. This is undoubtedly the future direction of ideological and political education. Professional practice is one of the ways and means by which undergraduates transform their studies

into productivity and ability. The current ideological and political education has a variety of ways. By practicing the practice of bringing people's caring in real time and in a virtual space, students can be provided with income. While stressing the social functions of ideological and political education, college students' ideological and political education must pay more attention to the promotion of the comprehensive development of college students' body and mind. We need to pay attention to the humanistic value of the ultimate pursuit of college students, and pay attention to the psychological counseling of students, especially students with problems. The mental health education of college students has been generally paid attention to by colleges and universities, and mental health classes have been widely carried out in colleges and universities. On this basis, colleges and universities should pay more attention to the implementation of psychological health education for college students to two aspects. First, the training of teachers, teacher training focuses on improving their professional dedication and practical ability. The second is to determine the goal of good student mental health.

Table 1. Template matching results

	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9
Template 0	5.353993	6.010234	2.353951	6.723271	6.073607
Template 1	3.628597	3.299126	3.27468	3.358404	3.631536
Template 2	5.16345	4.211902	3.89552	6.005568	5.367982
Template 3	6.022994	5.219571	3.80808	6.908802	5.400501
Template 4	2.657702	3.68029	2.483376	3.912043	3.221006
Template 5	6.856539	6.400546	2.516196	5.999597	4.895478
Template 6	5.734191	6.978437	1.776757	6.610075	4.653156
Template 7	5.202245	3.359849	6.463586	4.968174	4.889087
Template 8	5.256714	5.488921	2.64515	6.932816	4.815246
Template 9	5.275563	4.810851	2.704668	6.04422	6.961698

When teachers are grooming students' bad psychology, they must adopt different methods according to specific cases to guide students to learn psychological methods so that students can grow up in a good environment. First, there is a psychological counseling method in the ideological and political education in colleges and universities. College ideological and political educators usually adopt theoretical indoctrination methods to guide college students to form a sound personality and good psychological quality. In this process, there are also many ways to permeate the psychology and psychological needs of the educated, and adopt methods such as empathy and voicing, so as to effectively solve students' ideological confusion and psychological obstacles. This, to a certain extent, enhances the effectiveness of ideological and political education in colleges and universities. Second, psychological counseling enriches the methods of ideological and political education in colleges and universities. In colleges and universities, the methods of ideological and political education for college students are various. As a method to promote the growth of college students' psychological health, psychological counseling provides more perspectives for colleges and universities to carry out ideological and political education, and promotes the harmonious development of college students' psychological and physical qualities, ideological and moral qualities and scientific and cultural qualities.

#### **4.2. Psychological counseling and ideological and political education in universities are complementary**

Psychological counseling is based on the premise of paying attention to the consciousness of college students, and by acting on its psychological level, it solves the ideological problems from the inside out by solving psychological problems. The ideological and political education in colleges and universities has a clear value orientation. The aim is to cultivate excellent ideological and moral qualities of college students and guide them to establish socialist core values. The psychological counseling is to clear and guide college students in some psychological obstacles or psychological doubts, and not to guide and educate their dominant values. The third is to achieve

different forms. The common denominator of all approaches to psychological counseling is the direct treatment of the visitor's psychological problems. In addition to directly solving the problem of ideological understanding of college students, ideological and political education in colleges and universities can also indirectly change their ideological emotions by changing the environment in which the university students live and combining practical issues.

Table 2. Test results

Sample	ppm			Ppm1			error		
	CO	SO2	CH4	CO	SO2	CH4	CO	SO2	CH4
1	2.3	0.9	4.9	2.118	0.99733	4.9419	0.18196	-0.097326	-0.041916
2	1.3	3.9	2.6	1.1933	3.8711	2.2343	0.10667	0.02889	0.36575
3	1.3	0.9	3.9	1.1756	2.183	4.4462	0.12445	-0.283	-0.54616
4	2.3	0.9	5.8	2.1108	5.0992	4.3397	0.18921	-0.19923	-0.53975
5	0.7	0.9	3.9	3.8367	1.029	4.5063	-0.13672	-0.12899	-0.60627
6	3.3	1.2	4.9	3.3797	1.0892	4.9596	-0.079722	0.11083	-0.059608
7	3.3	4.9	1.8	2.1507	4.8458	1.2801	0.14928	0.054175	0.51992
8	1.3	2.9	0.7	1.1995	3.0722	1.0129	0.1005	-0.17217	-0.3129
9	2.0	3.8	1.2	1.8099	3.9736	1.0823	0.19005	-0.17356	0.11767
10	2.6	0.7	5.0	2.4962	0.9694	4.9909	0.10377	-0.1694	0.0090677

#### 4.3. Psychological grooming and ideological and political education in colleges have mutual heterogeneity

The development of psychological counseling in college ideological and political education provides an opportunity and platform for college teachers and students to vent their emotions, which can effectively inhibit the emergence of bad emotions. At the same time, psychological counseling is also a bidirectional role and a common discussion process. Through the confession of the parties and the mutual discussion between the parties, the parties' ability to empathize is gradually cultivated, and the parties are finally given a positive clearing and guidance so that the parties can be promoted in terms of cognition. In this case, psychological counseling has become a guide for the spiritual world of college teachers and students and a guardian of the spiritual world. Through psychological counseling, it can help college teachers and students actively adjust themselves, conduct self-discovery and self-examination, and then find out the direction and behavior of life. This is conducive to tapping the potential of teachers and students in colleges and universities so that in the process of pursuing their ideals, they will create an innovative spirit that fits with the spirit of the times.

Table 3. Survey results of effectiveness of classroom teaching

Data set	Experimental results	GK-SVMW	SVM
PTC_MM	62.75%	65.78%	64.97%
PTC_FM	61.26%	64.59%	64.88%
PTC_MR	63.98%	64.02%	65.86%
PTC_FR	64.33%	65.16%	68.43%
NCI1	66.28%	71.04%	71.37%
NCI109	65.96%	67.66%	68.86%

## 5. Conclusion

As an important method of ideological and political education in the new period, psychological counseling is the reference and development of “mental counseling” and “mental counseling therapy” proposed by western countries, and it is a breakthrough and innovation in traditional ideological and political education methods in China. We must accurately grasp the scientific connotation of psychological counseling and draw a clear demarcation line between psychological



counseling and psychological counseling. At present, our country's society has entered a critical period of development and a period of tough reforms. Social conflicts have become increasingly prominent and psychological problems have emerged. This is an urgent need for cultivating high-quality personnel in the new era, an indispensable requirement for the construction of a harmonious campus, and a concrete embodiment of people-centered ideological and political education in colleges and universities. Psychological diversion of emotional venting function, psychological support function and cognitive adjustment function have important coordination value. It can promote the harmony of teachers and students, coordinate interpersonal relationships, resolve interpersonal conflicts, self-fulfillment for teachers, and the construction of a harmonious campus. The process of psychological counseling is also a process of mutual discussion and consultation. Through the parties' confession and the discussion and discussion between the two parties, the parties were given positive guidance, help and inspiration so that the parties could be comforted in their hearts and be changed in their cognition.

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