

# STUDY ON THE EFFECT OF IDEOLOGICAL AND POLITICAL EDUCATION ON ALLEVIATING THE EMOTION OF COLLEGE STUDENTS WITH AFFECTIVE MENTAL DISORDER

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## SUMMARY

**Background:** Students' self-confidence can reflect their mental outlook, and students' mental state is closely related to school education curriculum. Ideological and political education in colleges and universities has become an important course that affects students' learning motivation and enthusiasm. Under the complex background of political and ideological development at home and abroad, more and more colleges and universities gradually began to realize that in addition to actively carrying out the traditional ideological and political theory education, they also need to actively explore, innovate and broaden the carrier of Ideological and political education and promote the new mode of Ideological and political education.

**Subjects and methods:** 200 college students with affective disorders were selected as the research object. They were divided into control group and experimental group according to the digital random grouping method. The students in the control group used general ideological and political education, while the experimental group used ideological and political education for patients with affective disorders. The experimental time was 6 months. After the experiment, the mood improvement of patients was evaluated by four indexes: depression, anxiety, mania and sleep disorder, and the K-means clustering algorithm was used for grade evaluation. The evaluation grade quantifies the degree of improvement through five grades 1-5. 1 indicates no improvement, 2 indicates slight improvement, 3 indicates improvement, 4 indicates significant improvement and 5 indicates serious improvement.

**Results:** It can be seen from table 1 that the mood of college students with affective disorders in the experimental group has been significantly improved, mainly because the ideological and political education for patients with affective disorders in the experimental group can timely dredge the affective disorders of college students.

**Conclusions:** Ideological and political education for patients with affective disorders can timely dredge college students' affective disorders, improve their psychological problems and enhance their ability to control their emotions.

**Key words:** affective disorder - colleges and universities - ideological and political education - college student

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## INTRODUCTION

Affective disorder is a kind of abnormal psychological performance, which has the pathological tendency of self-remission and repeated attack (Zhang et al. 2021). There is no difference between the mental activities of the retarded person and the normal person, and there is no personality defect (Deng 2021). Although it may occur many times, there is no mental decline. The main clinical manifestations are mania and depression (Yu 2021). If two types appear at the same time, it is called mania. College students with affective disorders have received the common attention of educators and social people. How to intervene and prevent college students with affective disorders has become a hot topic. Some experts once advocated the construction of political, ideological and moral education for college students to help students establish good and correct values and outlook on life and alleviate the psychological pressure of college students.

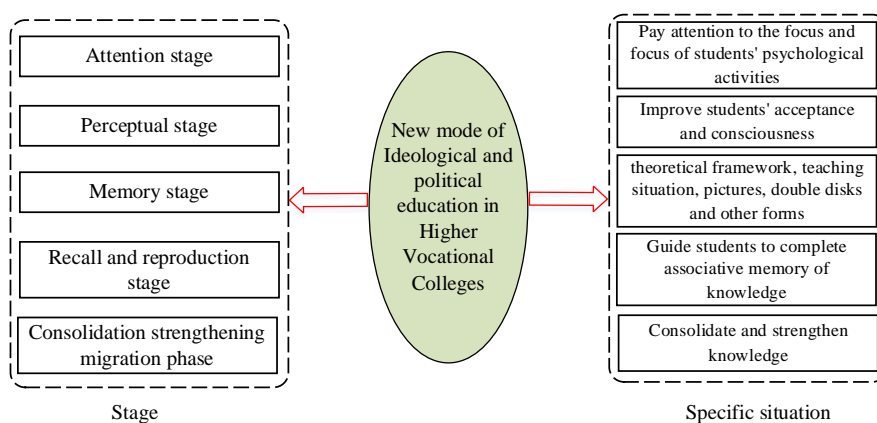
Starting from the ideological and political education in colleges and universities, Wang mainly analyzed the management factors affecting the ideological and political education in colleges and universities from the perspective of social environment and students' own factors. The results show that the level of ideological and political education in colleges and universities is

generally lower than that in Middle Schools, which indicates that the ideological and political education in colleges and universities needs to be strengthened (Wang 2021). Zeng researchers analyzed the application prospect of combining computer big data in the development of Ideological and political education in colleges and universities. The results show that ideological and political education in colleges and universities needs to vigorously promote big data technology (Zeng 2021). He and other researchers believe that nocturnal eating syndrome has been proved to be related to various negative physiological and psychological consequences. By exploring the relationship between neuroticism and nocturnal eating, it is found that, unlike neuroticism, psychological distress is an emotional state, and its plasticity is much greater through appropriate intervention (He 2018). However, at present, there are relatively few studies on the alleviation of college students' psychological pressure by political, ideological and moral education in China. In view of this, this study analyzes the role of Ideological and political education in higher vocational colleges on students' mental and emotional pressure through a self-made questionnaire, in order to find a teaching method that can alleviate college students' mental pressure.

Psychological stress has both positive and negative effects (Robinson 2019). On the one hand, moderate

psychological pressure can not only play a positive role in maintaining physical and mental health and improving learning and work efficiency, but also stimulate students' potential to the greatest extent and make them reach the best state in all aspects (Ling 2019). On the other hand, insufficient or excessive pressure has a negative impact on students' physical and mental health, learning and work efficiency, and even leads to relaxation of will or lack of motivation (Crewther 2020). The common stressors of college students are academic pressure, employment pressure, interpersonal pressure, love pressure, economic pressure, independent life pressure, family pressure, competition pressure and social pressure (Xia 2021). In this case, if students' various pressures are not relieved in time, they are likely to have emotional disorders. Affective disorder is a kind of abnormal psychological performance, which has the pathological tendency of self-remission and repeated attack (Ai 2021). There is no difference between the mental activities of the retarded person and the normal person, and there is no personality defect. Although it may occur many times, there is no mental decline. Affective disorder, also known as mood disorder, is a disease that leads to obvious and lasting mood and emotional changes due to a variety of reasons. Its clinical manifestations are usually continuous depression

and high mood, accompanied by psychotic symptoms such as hallucinations, cognitive and behavioral changes (Zhang 2019). At present, the etiology of affective disorder has not been confirmed. The possible pathogenesis is related to social psychological factors, neural development, neuroimaging, neuroelectrophysiology, neuroendocrine, neurobiochemistry, heredity and other factors (Gumus 2019). At present, the common effective treatment methods are related to neurobiochemical abnormalities, including neurotransmitter systems such as dopamine and norepinephrine. According to different clinical forms, patients can be divided into depression, mania, manic depression, cyclic mood disorder and dysthymic disorder. Depression is usually characterized by decreased will activity, slow thinking, low mood, physical symptoms, cognitive impairment and other main characteristics. The vast majority of patients still have anxiety. Manic disorder is characterized by increased activity, runaway thinking, high mood, abnormal cognitive function and other symptoms. In severe cases, it can be manifested as disturbance of consciousness. Manic depressive disorder refers to the characteristics of both mania and depression, but this phenomenon is rare in clinic.



**Figure 1.** New mode of Ideological and political education in higher vocational colleges

## SUBJECTS AND METHODS

### Study setting

The ideological status of college students is closely related to their attitudes, values, beliefs, concepts and other factors in their own cognitive system. Some data research points out that about 40% of college students have abnormal behavior, which has attracted extensive attention of teaching scholars and all sectors of society (Ai 2021; Zhang 2019; Gumus et al. 2019). Political education attaches importance to the formation and development of people's political and ideological quality and the law of ideological and political education. The ideological and political education in colleges and universities must learn from the theories and methods of psychology. At present, there are some problems in

ideological and political education in colleges and universities, such as low flexibility and serious formalization (Zhang 2020). The college Ideological and political education program studied and constructed includes five stages: attention stage, perception stage, memory stage, recall and reproduction stage, consolidation strengthening transfer stage (Wang 2020). The specific situation is shown in Figure 1. Attention stage refers to the process of obtaining ideological and political education information (Kanovsky 2018). It attaches importance to the focus and concentration of students' psychological activities in the process of teachers' class, so as to ensure that the transmitted information can be effectively received by students and avoid information filtering (Wen 2021). Perceptual stage refers to the process of encoding ideological and political education information. It is a very important

stage in memory processing and learning. At this stage, educators give full play to the function of schema to ensure that the educational content fits the cognitive schema of college students as much as possible. If necessary, they can process and improve the original schema. This can not only improve college students' acceptance and awareness of educational content, but also maximize the effect of ideological and political education. Memory stage refers to the process of storing ideological and political education information, which is divided into three aspects: long-term storage, short-term storage and sensory memory. In view of the advantages and disadvantages of the three storage methods, educators should complete teaching through theoretical framework, teaching situation, pictures and other forms, which can help students complete short-term memory and sensory memory (Li 2018). For long-term memory, students need to be guided to master it through double play. Recall and reproduction stage refers to the process of extracting information from ideological and political education, which is the stage of testing the effect of memory (Wang 2021). Educators set up situational teaching programs to help students reproduce and confirm knowledge. At the same time, we also need to guide students to sort out and summarize teaching knowledge, consolidate the internal relationship between knowledge, and prevent the stored knowledge from being effectively extracted. Consolidation strengthening transfer stage refers to the process of using ideological and political education information. It is the stage of transforming short-term memory into long-term memory. Educators consolidate knowledge with the help of Meta memory strategy, and set different scenes to complete the retelling of knowledge at an interval of time. Figure 1 shows the new model of Ideological and political education in higher vocational colleges (Ren 2018). The college ideological and political education program constructed by the Institute can improve students' psychology from the dimensions of perceptual judgment,

thinking and emotion, outward representation and memory intuition. This can make college students' attitude develop in a positive direction, effectively improve college students' emotion and improve their emotion management ability.

## Design

In order to analyze the role of Ideological and political education in colleges and universities on college students' mental and emotional stress, the research uses BMDP data statistical analysis software and K-means clustering algorithm to analyze the emotional state and evaluate the grade. 200 college students with affective disorders were selected as the research object. They were divided into control group and experimental group according to the digital random grouping method. The students in the control group used general ideological and political education, while the experimental group used ideological and political education for patients with affective disorders. The experimental time was 6 months. After the experiment, the emotional improvement of patients was evaluated by four indicators: depression, anxiety, mania and sleep disorder. The evaluation level was quantified by five levels of 1-5. 1 means no improvement, 2 means slight improvement, 3 means improvement, 4 means significant improvement and 5 means severe improvement. In order to avoid the interference of personal subjective influence on the results in the evaluation process, the average value of the research object is selected and the data after rounding is taken as the final result. The comparison between count data groups was analyzed by independent sample *t*-test, and the data comparison at different time points was analyzed by repeated measurement variance test.  $P < 0.05$  indicates that the gap has significant statistical difference, and  $P < 0.01$  indicates that the gap has very significant statistical difference.

**Table 1.** Recovery of research object data

Type	Control group	Experience group
Freshman	24	23
Sophomore	25	27
Junior	25	24
Senior	26	26
Ideological and political education	51	48
Non-ideological and political education	49	52
Age/year	22.35±1.36	23.12±2.03

As a classical data mining algorithm, the core idea of K-means algorithm used in the research is to find the partition scheme of clusters, and finally minimize the overall error of the mean value of clusters. Clustering algorithm is a classification method of unsupervised learning. It divides the data without similar labels and disordered arrangement into fixed categories through data processing. This method can divide the samples

with small difference and high similarity into the same category (cluster), and finally make all data samples be divided into different categories. Before clustering, select one sample point from all sample points as the center of the first stage clustering, and then put the rest of the data into the cluster with the shortest distance from the cluster center. Finally, the iterative method of constantly moving the center is used to divide the cluster.

The similarity criterion of the algorithm is the distance between data, which indicates that the smaller the distance, the higher the similarity of data, and the greater the possibility of being divided into the same category. Although the algorithm steps of this method are simple and the processing effect is high and efficient, there are also the following problems. The algorithm is easy to fall into the local optimal solution and has a strong dependence on the initial conditions.

Since the parity of the original set data cannot be determined, it will be put into the group. This ensures that one set is the two closest data objects in the data set, eliminates the random uncertainty in classification, and shows the spatial distribution uniformity of cluster centers in the selection stage, so as to avoid the concentration of initial cluster centers.

K-means algorithm reduces the amount of computation by initializing the selection of clustering centers. The specific process is as follows. First, randomly select an initial cluster center and calculate the distance  $B(x)$  from each point to the cluster center. Second, re select the cluster center according to the probability, and repeat the above steps to find  $K$  initial cluster centers. Third, calculate the distance  $B$  between each sample and each centroid, and divide all samples into  $C^i$  with the highest similarity. Fourth, calculate the centroid of each class  $C^i$  and the distance from the sample to the new cluster center again, and divide it into new classes. When the maximum number of iterations is reached or the centroid remains unchanged, the criterion function converges. Fifthly, the categories of sample data and  $K$  clustering centers are finally obtained.

However, the algorithm is not suitable for dealing with discrete data, and has a good effect on continuous data. Therefore, a small amount of education time field data is selected for the training sample set. Given training sample  $\{x^{(1)}, \dots, x^{(m)}\}$ , where  $x^{(i)} \in \square^n$ . K-means algorithm is based on the sum of squares of minimum error, and its cost function  $x^{(i)} \in \square^n$  is equation (1).

$$J = \sum_i^n \sum_j^k r_{ij} \|x^{(i)} - u_j\|^2 \quad (1)$$

In formula (1),  $u_j$  refers to the category to which the first sample belongs. The value of  $r_{ij}$  depends on whether the data  $x^{(i)}$  is classified as  $u_j$ . If so, the value is 1. Otherwise, the value is 0.

The calculation formula of the criterion function is shown in equation (2).

$$E = \sum_{i=1}^k \sum_{P \in C_i} (P - m_i)^2 \quad (2)$$

In equation (2), a point in all object spaces in the database is represented by  $P$ , the mean value of cluster  $C_i$  is represented by  $m_i$ , and the sum of square errors between each object and the corresponding cluster center is represented by  $E$ . The calculation formula of probability  $T$  that the sample is selected as the cluster center is equation (3).

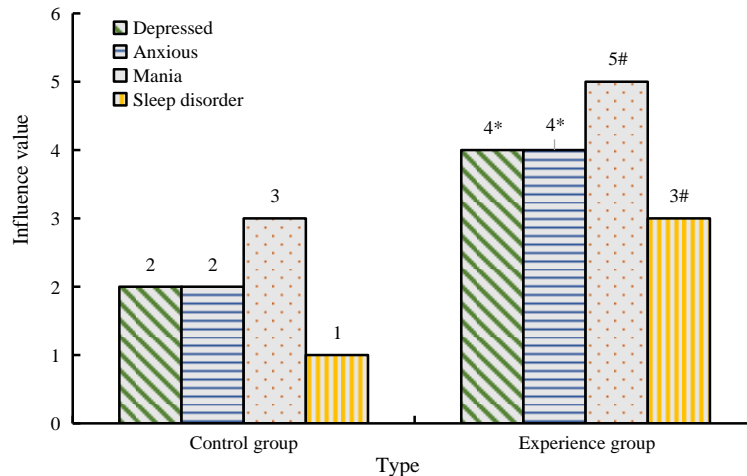
$$T = B(x)^2 / \sum_{i=1}^n B(x_i)^2 \quad (3)$$

In formula (3),  $B(x)$  refers to the similarity between data, which is calculated by various distance formulas. Euclidean distance calculation formula is adopted in the study.

## RESULTS

Figure 2 shows the emotional improvement of college students with affective disorders in the two groups after 6 months of the experiment. According to table 1, the improvement degree of depression, anxiety, mania and sleep disorder in the control group was 2, 2, 3 and 1 respectively. The improvement degrees of depression, anxiety, mania and sleep disorder in the experimental group were 4, 4, 5 and 3 respectively. The emotion of college students with affective mental disorder in the experimental group has been significantly improved, mainly because the ideological and political education for patients with affective mental disorder in the experimental group can dredge the affective mental disorder of college students in time, the general ideological and political education program adopted by the control group cannot find students' affective mental disorders in time, and there is no appropriate teaching program to alleviate students' affective mental disorders, which eventually makes students have more serious psychological problems.

Table 2 refers to the improvement effect of patients with affective disorders in the experimental group in the experimental cycle. With the increase of experimental time, the improvement of students with affective disorders in the experimental group was improved. Compared with before the targeted ideological and political education intervention, the improvement after one month, two months and six months of intervention has improved. One month after the intervention of Ideological and political education for patients with affective disorder, the influence values of depression, anxiety, mania and sleep disorder in patients with affective disorder were 3, 3, 4 and 2; After 3 months of intervention, the influence values of depression, anxiety, mania and sleep disorder in patients with affective disorders were 3, 3, 4 and 2. This further shows that the ideological and political education program for patients with affective disorders can improve the anxiety symptoms of patients with anxiety disorders.



**Figure 2.** Emotional improvement of college students with affective disorders in the two groups  
Note: \* refers to  $P < 0.01$ , # refers to  $P < 0.05$ .

**Table 2.** Improvement effect of patients with affective disorder in the experimental group in the experimental cycle

Index	Before	After 1 month	After 3 months	After 6 months
Depressed	2	3	3	4
Anxious	2	3	3	4
Mania	3	4	4	5
Sleep disorder	1	2	2	3

Table 3 refers to the improvement effect of patients with affective disorders in the control group in the experimental cycle. With the increase of intervention time, the improvement of patients with affective disorders in the control group was improved. Compared with before the intervention of ordinary ideological and political education, the improvement situation after one month, two months and six months of intervention has improved. After one month of intervention through

general ideological and political education, the influence values of depression, anxiety, mania and sleep disorder in patients with affective disorders were 1, 1, 2 and 1. After 3 months of intervention, the influence values of depression, anxiety, mania and sleep disorder in patients with affective disorders were 2, 2, 3 and 2. This further shows that the general ideological and political education program can improve the anxiety symptoms of patients with anxiety disorder.

**Table 3.** Improvement effect of patients with affective disorder in the control group in the experimental cycle

Index	Before	After 1 month	After 3 months	After 6 months
Depressed	1	1	2	2
Anxious	1	1	2	2
Mania	1	2	3	3
Sleep disorder	1	1	1	1

## CONCLUSION

The purpose of Ideological and political education is to improve students' comprehensive quality, and the ultimate goal is to cultivate high-quality talents with all-round development of morality, intelligence, physique and beauty. The study created an ideological and political education program including attention stage, perception stage, memory stage, recall and reproduction stage and consolidation strengthening transfer stage, so as to intervene the emotional symptoms of patients with affective disorders. 200 college students with affective disorders were selected as the research object, and the emotional state was analyzed and evaluated by BMDP

data statistical analysis software and K-means clustering algorithm. The results showed that the improvement degrees of depression, anxiety, mania and sleep disorder in the control group were 2, 2, 3 and 1 respectively. The improvement degrees of depression, anxiety, mania and sleep disorder in the experimental group were 4, 4, 5 and 3 respectively. The practitioners of college students' daily ideological and political education need to establish a correct political direction, strengthen their own ideological and moral cultivation, enhance their sense of social responsibility, and strive to become the guide and direction for the healthy growth of college students. The curriculum optimization of college students' ideological and political education program

combined with psychology is effective and practical, but the specific methods and technical level used by different groups need further research, which needs to be improved and improved in the follow-up.

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# RESEARCH ON THE IMPACT OF RURAL LANDSCAPE PLANNING AND DESIGN ON ALLEVIATING AUDIENCE PSYCHOLOGICAL ANXIETY FROM THE PERSPECTIVE OF “BEAUTIFUL COUNTRYSIDE”

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## SUMMARY

**Background:** Rural landscape design should consider the psychological feelings of rural residents, avoid the destruction of rural landscape context and villagers' cultural activities to the greatest extent, and create a rural environment in line with the rhythm of residents' production and life and the evolution characteristics of rural environment with the help of modern design ideas.

**Subjects and methods:** 100 residents with different degrees of anxiety were selected as the research object to analyze the impact of rural landscape planning and design on the psychological anxiety of the audience from the perspective of beautiful countryside. The study used State Trait Anxiety Inventory (ATAI) to analyze anxiety, and used expectation maximization algorithm (EM) to classify the improvement effect of anxiety. ATAI scale can be divided into state anxiety and trait anxiety. The improvement effect evaluation indicators are set as four levels: no improvement, slight improvement, improvement and obvious improvement. The rural landscape planning strategy includes four levels: constructing rural characteristics and promoting the construction of spiritual civilization (measures 1), comprehensively considering the geographical environment (measures 2), improving the rural settlement landscape (measures 3) and optimizing the natural ecological landscape (measures 4).

**Results:** It can be seen from table 1 that the four improvement measures have improved residents' state anxiety and trait anxiety to varying degrees, which may be because different rural landscape planning improvement measures can relieve residents' psychological anxiety.

**Conclusions:** The intervention methods of conventional psychological diseases can alleviate the phenomenon of psychological anxiety, but their application scope is greatly limited, and the implementation is difficult, the effect is poor, and the real-time performance is low.

**Key words:** beautiful countryside - rural landscape - planning and design

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## INTRODUCTION

China has a large rural population. With the continuous acceleration of urbanization and the improvement of material living standards, rural residents are likely to have a variety of adverse emotions such as anxiety, tension and irritability when facing such heavy life and work pressure (Chew 2020). If rural residents are in anxiety for a long time, their life and work will be particularly affected, and may even develop into other more serious mental diseases (Klein 2020). Since the Fifth Plenary Session of the 16th CPC Central Committee put forward the strategy of beautiful rural construction, urban construction and rural construction have gradually shown great differences (Kim 2018). The construction of beautiful countryside not only has positive significance for the construction of social harmony and stability, but also plays an important role in promoting the revitalization of rural economy.

Researchers such as Alem believe that anxiety is an abnormal bad psychological emotion in human beings. It is mainly an irritable emotion formed by paying too much attention to the future, destiny and life safety. Its clinical manifestations include anxiety, panic, tension, anxiety and other psychological manifestations (A L E M 2019). Broekman and other scholars pointed out that

anxiety usually refers to people's bad emotions, such as risk, stress and pain, which are beyond their acceptable range, and it is difficult for people to face and solve these problems (Broekman 2019). Harasimczuk scholar and team analyzed that the main causes of anxiety are various aspects of pressure, high standards and strict requirements, health problems, smart phones, etc. they believe that the length of advertising language has an impact on drivers' attention and motor behavior (Harasimczuk 2021).

Anxiety is an abnormal bad psychological emotion existing in people. It is mainly an irritable emotion formed by excessive concern about the future, fate and life safety. Its clinical manifestations are anxiety, panic, tension, anxiety and other psychological manifestations (Sabela 2018). Medical psychologists believe that anxiety usually refers to people's adverse feelings such as risk, pressure and pain that exceed their acceptable range, and it is difficult for people to face and solve these problems (Crawford 2018). Generally speaking, the essence of individual anxiety is a very reasonable emotional response. Under normal circumstances, people cannot worry too much (Ward 2021). But if people have long-term anxiety, they can easily develop this anxiety into emotional and physiological diseases. At present, the main causes of anxiety are all aspects of pressure, high standards and strict requirements, health