

Retraction

Retracted: Discrete Dynamic Modeling Analysis of College Students' Ideological and Political Education Based on Particle Swarm Optimization Algorithm

Mathematical Problems in Engineering

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

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- [1] H. Wang, "Discrete Dynamic Modeling Analysis of College Students' Ideological and Political Education Based on Particle Swarm Optimization Algorithm," *Mathematical Problems in Engineering*, vol. 2022, Article ID 4118265, 8 pages, 2022.

Research Article

Discrete Dynamic Modeling Analysis of College Students' Ideological and Political Education Based on Particle Swarm Optimization Algorithm

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Today, with the rapid development of the Internet, the new carrier and platform of college students' ideological and political education innovation need to be improved. In order to improve the timeliness of college students' ideological and political research, in view of this characteristic, particle algorithm is studied. Combined with the principle of particle algorithm, the core idea of particle algorithm is applied. College students think about their past behaviors and conduct self-evaluation and reflection. On the other hand, it is the competition and cooperation between multiple academic groups. Combined with particle swarm optimization algorithm, through model optimization, deal with the fitness value between the two attributes to optimize the work. Positive and negative excitation measures are introduced in the experimental research, and the particle swarm optimization evaluation function and behavior weighting factor are analyzed to hypothetically describe the working method. At the same time, it is pointed out that the educational working methods should be adjusted in time according to the changes of student groups and individual behaviors, so as to achieve good work results. Research shows that positive incentives are better than no incentives, and the introduction of negative incentives can only prevent college students from becoming negative role models because they cannot give them the best state of consciousness.

1. Introduction

Ideological education in colleges and universities can improve students political consciousness, so ideological education in colleges and universities is very important to students. Nowadays, ideological and political education in colleges and universities has diversified characteristics. Compared with traditional teaching methods, today's ideological and political education in colleges and universities not only needs to enhance students' ideological and political consciousness in teaching but also needs to guide students' ideological development in life, so it has a more difficult teaching task [1]. The ways of ideological education in colleges and universities include student unions, ideological and cultural courses, the election of activists, or the election of reserve teams. How to improve students teaching level in colleges and universities has become an important task [2].

At present, China's education is in a critical turning period, and there are some inefficient problems in many teaching links. Low efficiency is not only a common problem in college students' ideological education but also a normal phenomenon in the process of ideological construction [3]. Due to the neglect of some teaching frequencies, there are some fuzzy management phenomena in the process of college students' ideological education, which has even affected the normal progress of ideological and political work in colleges and universities. Therefore, the teaching pressure in colleges and universities is gradually increasing [4]. After investigation, some colleges and universities are unwilling to invest too much energy in ideological education, which makes the phenomenon of fuzzy management more prominent. Only a few colleges and universities believe that it is very necessary to strengthen ideological and political education. Therefore, some colleges and universities need to strengthen management negligence [5]. The most relevant

research in teaching management analysis is generally analyzed from the perspective of development direction, so we can analyze the shortcomings of current teaching. In many studies, the evaluation results of ideological and political education are not accurate enough. This makes the teaching management to be optimized. This paper uses particle swarm optimization algorithm to optimize it.

PSO is a behavior of prey by simulating birds, which can be also called a bird foraging algorithm and represents the best recent strategy for birds to find food in the closest range [6]. Apply the particle swarm algorithm to people, which is the process of human interaction, as well as the process of mutual influence, mutual imitation, and mutual learning. Finally, people will become more and more similar and later become a norm and civilization. There are many different behavioral habits on the Earth, such as the behavioral habits of humans and birds or fish. Although the behavioral habits between humans and other species are vastly different, when we are together in a multidimensional cognitive space, human trajectories are very similar to them [7]. Some researchers simulated the foraging behavior of birds and studied the particle swarm optimization algorithm. Solve the problem by using fitness. Start the search from a random solution and gradually track and search the optimal value of the current algorithm [8]. After verification, particle swarm optimization algorithm has the advantages of high precision, easy implementation, and fast convergence speed. However, particle swarm optimization algorithm has the disadvantage of premature aging in practical operation, resulting in low calculation accuracy [9].

2. State of the Art

Positive motivation is an initiative incentive that affirms or supports a certain behavior so that it can continue. Ultimately, human needs are met and the goals of the organization are achieved [10]. For college students, positive motivation is first of all by affirming a certain positive behavior of students and giving certain material rewards, thereby mobilizing students to become positive and take typical subjective initiative. Through correct education and creating useful paradoxes, set the benchmark for college students, point the direction, and establish positive energy to resist negative energy [11]. Through correct education and useful public opinion, the benchmark for college students is established, the direction is specified, and positive energy is used to resist negative energy. For example, it is necessary to praise students who perform well in a timely manner and affirm their words and deeds. The students' mistakes and words are promptly criticized and corrected to plan the daily behavior of the college student group, thus promoting good ideology and morality and becoming collective wealth [12]. However, negative incentives are considered a passive incentive. By stopping, it denies people's behavioral habits and finally weakens them until they disappear and develops in a good direction. Both positive and negative incentives are essential. First of all, these two incentives directly affect individuals and then ferment and indirectly guide the surrounding individuals and groups [13]. Jongbin once did a

study and proved from a psychological perspective that a certain amount of negative feelings is greater than the satisfaction of the same amount of positive feelings [14]. For example, if a person loses a hundred yuan, the negative feeling he produces will be stronger than the positive feeling brought about by the one hundred yuan. Therefore, when educating college students, negative incentives must be used with caution because punishment will leave students with trauma in their hearts [15]. In college students, there are several types of negative incentives adopted by the school for students, including criticism, punishment, detention, and expulsion. In these negative stimulations, measure must be grasped, and any deviation cannot be produced. The effective use of positive and negative incentives for students can effectively improve their ability to distinguish between right and wrong and enhance group consciousness behavior [16].

3. Methodology

3.1. Network-Based Teaching Theory. Network multimedia technology brings many advantages that traditional teaching cannot match. Network teaching is a student-centered teaching method. The huge virtual reality teaching space in the network provides students with conditions for autonomous learning.

The network makes students face a large number of fragmented resources, and they must find knowledge according to the teaching objectives. With the help of network platform and cyberspace, the interactive teaching mode has become an all-round interaction. In the process of network-based teaching, teachers not only impart knowledge but also play the role of designers, organizers, managers, and assistants in the whole teaching process, so as to promote the formation of their positive learning attitude, improve their autonomous learning ability, and lay a good foundation for lifelong learning. However, the traditional classroom emphasizes the understanding and memory of knowledge, which makes students often passively accept the knowledge and training in the classroom, resulting in dependency psychology and lack of positive learning spirit. Therefore, the role of teachers is changing from the foreground to the background.

The interaction between traditional classroom teaching and online teaching environment is shown in Figure 1.

3.2. Content of Mobile Internet Ideological and Political Education. With the gradual popularization of mobile terminals, mobile networks, and mobile applications, the innovation of ideological and political education model and the construction of new education platform have become important means to improve the effectiveness of education. The ideological and political education content of mobile Internet is shown in Figure 2, including the following. (1) Adjust the content of mainstream terminals, strengthen layout design, and promote the rationalization of ideological and political theory education content. According to the appearance design and operating system of different types of products, in order to ensure that the educational content is

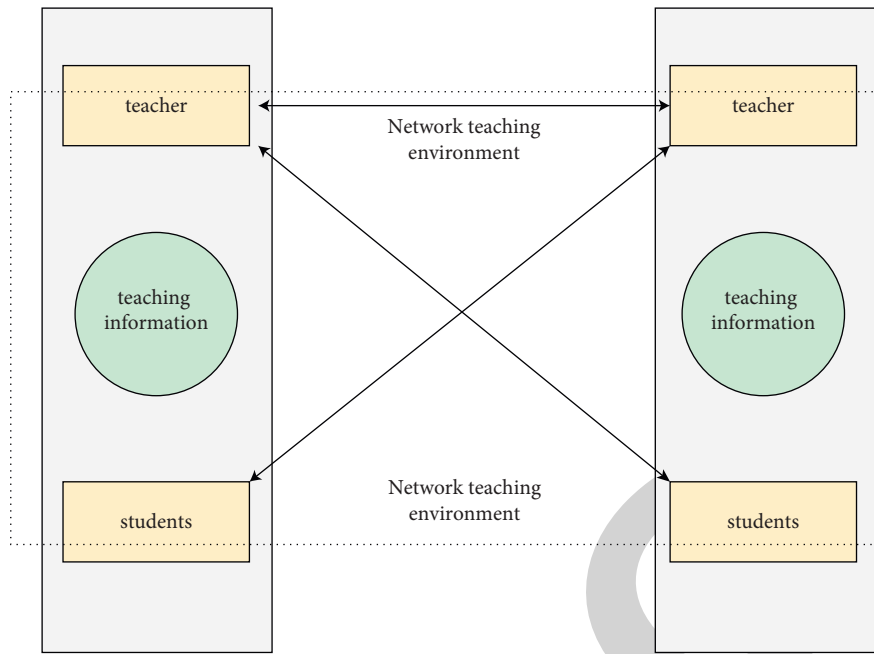


FIGURE 1: Interaction between teachers and students in network teaching environment and traditional classroom teaching environment.

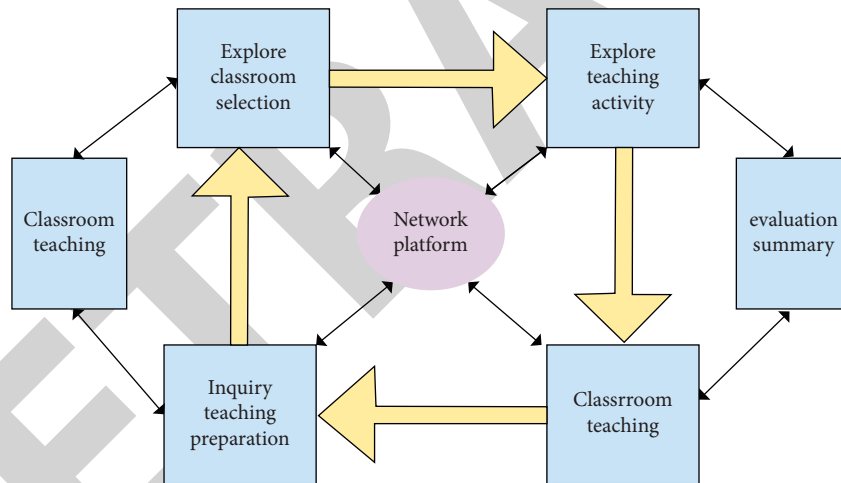


FIGURE 2: Content of mobile Internet ideological and political theory education.

more clear and coherent, the ideological and political education of college students should strengthen the cooperation between colleges and universities, and the layout design should be carried out according to the ideological and political education content of college students around the current mainstream terminal. (2) Through data analysis, the quality of after-school recommendation is improved and the personalization of ideological and political education content is improved. Perfect after-school knowledge recommendation refers to information browsing based on mobile Internet users and providing information resources required for user data analysis. In order to improve the content of ideological and political education, it is necessary to actively combine mobile Internet technology, conduct data analysis and algorithm research according to college students' web page records, comprehensively analyze college students'

reading interests, develop personal learning database, and actively guide college students' ideological and political learning direction. (3) Pay attention to audience experience, deepen the integration of learning and entertainment, and promote the diversification of ideological and political theory education content. The survey found that when using the mobile Internet, college students prefer simple and vivid entertainment information and are more likely to express their interest in pictures, videos, and audio. The pan entertainment in network culture is manifested in the large number of dissemination subjects of Internet entertainment information and the entertainment of Internet information content and form. The Internet pan entertainment has formed a challenge to the ideological and political education of college students, which is embodied in testing the quality of ideological and political educators; dispelling the thinking

ability of college students; impacting the authority of ideological and political education content; and reducing the effectiveness of ideological and political teaching methods. Facing these challenges, colleges and universities should improve the political and theoretical literacy of ideological and political educators; strengthen the education of ideals and beliefs and cultivate the healthy personality of college students; strengthen the supervision of campus network and create a clean campus network environment; and combine teaching with pleasure to enhance the effectiveness of ideological and political education methods. Therefore, in the innovation of ideological and political theory education based on mobile Internet technology, we should pay attention to the characteristics of college students' thought and behavior, pay attention to the combination of students' interests and teaching content, meet the practical emotions and needs of college students, establish vivid, happy, and relaxed teaching content, and improve the interest and attraction of ideological and political theory education.

3.3. The Basic Principle of PSO. The search population size consists of N particles $X_i = (X_{i1}, X_{i2}, \dots, X_{iN})$, where $V_i = (V_{i1}, V_{i2}, \dots, V_{iN})^T$, $i = 1, 2, \dots, N$ indicates the flight speed of the i th particle. $x_i = (x_{i1}, x_{i2}, \dots, x_{iD})^T$, $i = 1, 2, \dots, N$ represents the spatial position of the i th particle. $p_i = (p_{i1}, p_{i2}, \dots, p_{iD})^T$, $i = 1, 2, \dots, N$ indicates the individual extremum of the particle swarm search. g represents the entire population, and the global optimal position searched for the entire particle swarm is represented by $pg = (p_{g1}, p_{g2}, \dots, p_{gD})^T$. The speed and position update formula of the particle swarm algorithm is expressed as follows:

$$\begin{cases} V_{id}^{k+1} = V_{id}^k + c_1 r_1 (p_{id}^k - x_{id}^k) + c_2 r_2 (p_{gd}^k - x_{id}^k), \\ x_{id}^{k+1} = x_{id}^k + V_{id}^{k+1}, \end{cases} \quad (1)$$

where r_1 and r_2 are two different functions that are randomly extracted in the interval $[0, 1]$. c_1 and c_2 represent learning factor, which is also called an acceleration factor. The speed at which individual particles search in a local range is adjusted by c_1 , and the speed at which individual particles are searched globally is adjusted by c_2 . The dimension of a particle in D -dimensional space is represented by d . k is the number of iterations of the algorithm. Particle search has certain limitations, and it can only be searched if a certain constraint is met. It is also necessary to set the speed at which the particles change in position and to be limited to the maximum speed.

The first is V_{id}^k , which indicates the original velocity of the particle. The second is $c_1 r_1 (p_{id}^k - x_{id}^k)$, which represents the "cognitive" part of the particle, expressing the thoughts of the particle itself. It is the direction of a certain direction of action when the particle is now compared to the best position that has ever appeared. The third is $c_2 r_2 (p_{gd}^k - x_{id}^k)$, which represents the "social" part. It is a comparison of the current position of the particle with the best position that the entire group has ever seen, showing the process of sharing, cooperating, and learning between the particles. Through

this iterative search, particles not only combine their own motion changes and experience but also contrast with other particles, so as to avoid being a local optimal solution.

3.4. Implementation Flow of PSO. PSO gets inspiration from the model and is used to solve optimization problems. In PSO, the potential solution of each optimization problem is a point in the search space called particle. All particles have a fitness value determined by the optimized function, and each particle also has a speed that determines the direction and distance they fly. Then, the particles follow the current optimal particle to search in the solution space. PSO is initialized as a group of random particles (random solutions), and then the optimal solution is found through iteration. At each time, the particle tracks two extreme values to update itself. The first is the optimal solution found by the particle itself, which is called individual extremum. The other extreme value is the optimal solution of the whole population, which is the global extreme value. In addition, the whole population cannot be used as all neighbor values of particles, which are considered local extremum. The process of the algorithm is as follows: the most important thing of iterative search is to set the basic parameters of particle swarm optimization. Firstly, the number of particle groups N in PSO is set to search the dimension D of space, so as to solve the range of space, the maximum flight velocity of particles, the sum of acceleration factors, and the maximum iteration times of PSO. Then, the velocity and position of each particle are initialized in the solution space, and its current position is regarded as a single extreme value. Secondly, each particle is evaluated according to its fitness function value. Thirdly, the fitness function of each particle is compared with its extreme value. If it is better than a single extreme, it is replaced by a new single extreme; otherwise, the single extreme remains unchanged. Then, the updated individual extremum is compared with the global extremum. If it is better than the global extremum, it is replaced by a new global extremum; otherwise, the global extremum will not change. Fourthly, the positions and velocities of all particles are updated according to formula (1). Fifthly, check whether the algorithm satisfies its ending condition. If the number of iterations is already the maximum number of iterations or the result satisfies the convergence requirement of a set, the iterative search is stopped and the final result is output. Otherwise, return to Step 2 and start a new calculation iteration. The flowchart of the algorithm is shown in Figure 3.

The standard PSO algorithm is an improvement to the basic PSO algorithm by adding an inertia weight ω to the velocity iterative update formula. The formula of the standard particle swarm algorithm is as follows:

$$\begin{cases} V_{id}^{k+1} = \omega V_{id}^k + c_1 r_1 (p_{id}^k - x_{id}^k) + c_2 r_2 (p_{gd}^k - x_{id}^k) \\ x_{id}^{k+1} = x_{id}^k + V_{id}^{k+1} \end{cases}, \quad (2)$$

$$\omega = \omega_{\text{start}} - \frac{\omega_{\text{start}} - \omega_{\text{end}}}{T_{\text{max}}} \times T,$$

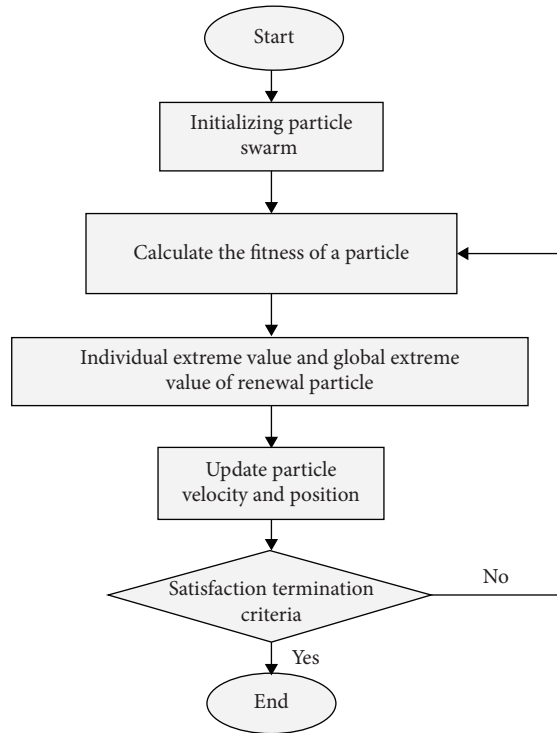


FIGURE 3: Flow diagram of particle swarm optimization.

where T_{\max} represents the maximum number of iterations of the population, T represents the current number of iterations, and ω_{start} and ω_{end} are the inertia weights at the beginning and end, respectively.

3.5. Experiment on the Effect of Positive and Negative Incentive Strategies under PSO. Guided by the PSO model and connected with the work of ideological and political education, it can be easily found that each college student's consciousness behavior may be influenced by the habits he cultivates, the usual experience, and the experience of the group. Only a part of the students' herd mentality is relatively strong, that is, the c_2r_2 value is large, so the group experience has a greater impact on him. The other part of the college students may have stronger personality, that is, the c_1r_1 value is larger. There are some more rebellious college students, and c_2 may still be negative. Generally speaking, college students' thinking is more active and divergent, and its inertia weight ω is relatively large. At present, the most commonly used ideological and political education strategy includes positive and negative incentives. Negative motivation was originally a concept in management. In order to improve the efficiency of ideological and political education, management knowledge has been widely used in ideological and political education. Negative motivation is to regulate individual behavior by means of punishment and effectively realize the systematic activities of organizing daily targets. It follows the principle of negative reinforcement of human behavior results to realize the role of motivation and weaken the individual to continue to take such behavior. Then, under the PSO algorithm, what is the role of positive and

negative incentives specifically in ideological and political education? With this question, positive and negative incentives are introduced into the PSO model. At this time, the position of each particle, that is, the updated state of the individual's individual consciousness behavior, is still expressed by formula (1):

$$V_{id}^{k+1} = \omega V_{id}^k + c_1 r_1 (P_{id}^k - x_{id}^k) + c_2 r_2 (P_{gd}^k - x_{gd}^k) + c_3 r_3 (S_1^k - x_{id}^k) + c_4 r_4 (S_2^k - x_{id}^k). \quad (3)$$

For the sake of research, first of all, assume that each teacher's positive and negative incentives for students are the same and remain the same throughout the observation timeframe. S_1 indicates the positive excitation point. c_3 indicates the normal number, which is also called the trend constant of the positive excitation. S_2 indicates the negative excitation point. c_4 indicates the negative constant, which is also called the negative excitation tendency constant, and c_3 and c_4 are randomly selected values between $[0, 1]$, which can only express the conscious behavior of each stage of college students, and are subject to the uncertainty reaction of positive and negative incentives. Based on the discrete group model, the students' group consciousness behavior is simulated by the positive and negative incentives.

Assume that the dimension of the consciousness state of the student group is $n = 2$, the overall scale is $m = 10$, and the evaluation function is expressed as a quadratic continuous surface. The larger the value of this quadratic function is, the better the state of consciousness it exhibits. Its minimum value is F and the maximum point is R . The positive incentive point S_1 is in the vicinity of the maximum value point R , which indicates that the teacher guides the student consciousness state. The negative incentive point S_2 is in the vicinity of the minimum value point F , indicating that the teacher establishes a typical value of negative direction, thus regulating the student's state of consciousness. The small dot is the initial state of consciousness that each college student randomly generates, as shown in Figure 4.

In this experiment, the parameters of the particle swarm model are set as follows: $\omega = 0.5$, $c_1 = 0.5$, $c_2 = 0.5$, $c_3 = 0.5$, and $c_4 = 0.5$. There are 4 cases, represented by curves a, b, c, and d. Curve a indicates that no excitation is introduced. Curve b indicates that only positive excitation is introduced. Curve c indicates that only negative incentives are introduced. Curve d indicates that both positive and negative stimuli are introduced. These four cases are repeated 20 times, and the curves evolved by the college students' group consciousness optimization model were averaged in the 20 experiments, as shown in Figure 5. From the figure, the following can be found. (1) When positive and negative incentives are introduced at the same time, the student group's sense of optimism is the best. (2) It is better to introduce only positive incentives than to introduce no incentives. (3) The experimental effect of not introducing any incentive is better than the introduction of only negative incentives. Combined with the working experience of ideological and political education, the results of the experimental results (1) and (2) are not surprising. What draws

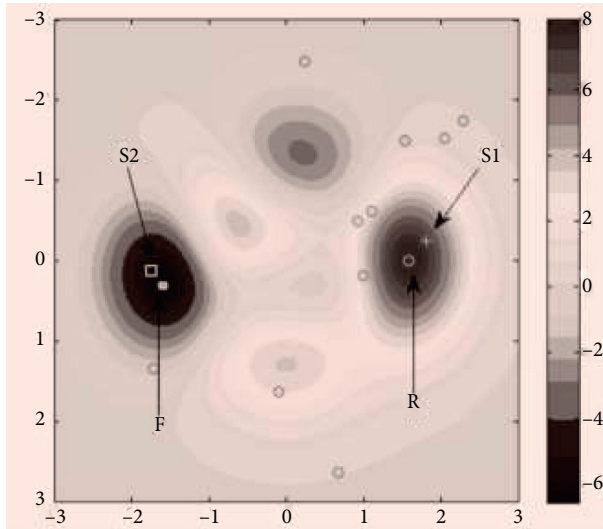


FIGURE 4: The position of each student's positive incentive point.

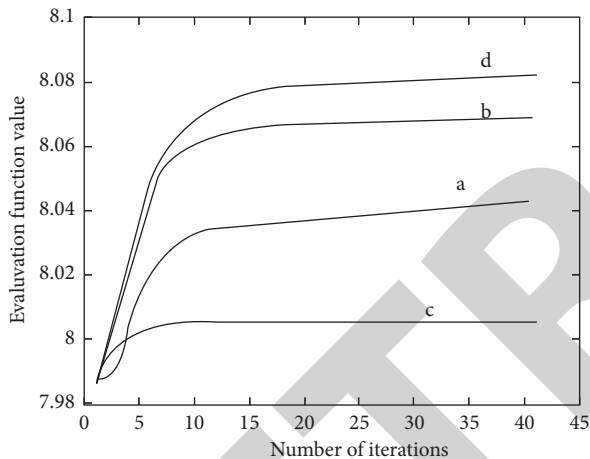


FIGURE 5: The average curve of student group consciousness optimization and evolution under the four conditions.

our attention is experimental result (3). In the ideological and political education, if only the negative incentives are introduced and the positive incentives are not introduced, the students should not be allowed to converge on the state of optimal consciousness, and at most, the college students can be kept away from the negative typical.

The experiment found that it is necessary for educators to improve their work strategies in response to the effects of positive and negative incentives. Students can become active because they are stimulated by a certain factor, and they become negative because of the stimulation of a certain factor. Negative motivation is a kind of stimulating information that is unpleasant to the ear and uncomfortable to people. Most people will have the psychology of exclusion and resistance to it. Negative incentives should be carried out appropriately and realistically. Therefore, when using negative incentives, we must grasp the scale. If the negative incentive is weak, then the negative incentive is in vain and cannot help students and teachers' introspection. If the

negative incentive is too strong and exceeds its limit, such as the use of corporal punishment, it is easy to deepen the misunderstanding between teachers and students. It can be seen from the graphs of the student group consciousness optimization model under the above four different incentive situations that positive and negative incentives should be actively introduced in the ideological and political education work, and cautious treatment should be taken when the negative incentive measures are adopted separately. In this experiment, the evaluation function and the ideological and educational education system that influence the ideology of the student group are simplified. However, the principle and result of the quadratic continuous surface of this paper can also play a very good educational role in the daily ideological and political education of colleges and universities.

4. Enlightenment from the Working Methods of Ideological and Political Education

4.1. Behavioral Inertia. The particle swarm algorithm is actually the evaluation and reflection of the particles on their previous behavior. Among them, the weight factor ω plays the most important role. In the PSO algorithm, the weighting factor ω enables the particles to continue to move the inertia at all times and also directly affects the direction and displacement of the particles. In the ideological and political education of colleges and universities, ω value can be regarded as the inertia of the behavior of the educators. In the entire group, if the behavior of the educated person is too large or too small, the best solution will not be found in it. The key issue in solving this problem is to find out why this behavior is too fast or too slow. The study found that people's behavioral inertia and their own consciousness development have an inseparable inertia. The growth and development of self-consciousness is the process of self-recognition of the relationship between the individual and the environment and the inertia of environment on Friday and the behavior. It is necessary for teachers to adjust the students' behavioral inertia, so as to enhance the self-recognition of college students and make them develop in a healthy way. Among them, psychological counseling and self-education can play a very good role. Counseling can enable students to enhance their understanding of themselves, better adapt to society, and tap their potential. But ideological and political education and general psychological counseling are also different. The focus of ideological and political education is on the social attributes of people, while psychological counseling is the natural attributes of people. The self-education law is also an important way of ideological and political education. It is mainly aimed at the characteristics of the behavioral inertia factor of the educated, adopting a reflective method, comparing the past thoughts and behaviors, finding the inadequacies, and finally self-reforming. In the above mentioned publicity, ωu_i^k and $c_1 r_1^k (S_i^k - x_i^k)$ represent the status quo and cognition of particles, and self-reformation allows the educated to reflect on the

status quo and reconstruct the state compared with the past.

4.2. Learning Factors. The weight of the learning factor also plays a crucial role. It can not only represent the size of the particle learning ability but also affect the particle's entire search ability. The game of subjectivity and autonomy of learning factors also determines its optimal position. If its autonomy is stronger, the greater the weight of the learning factor, the stronger its learning ability, but it may also think too much and lose personality. Autonomy is primarily about action-oriented education. It is student-centered, giving students a sense of subjectivity, allowing them to make full use of what they have learned to improve their ability to solve problems and express their opinions. Action-oriented process is a process of constructing a knowledge system through passive and practical activities, which makes students change from passive to active. It is not a simple input and extraction process but a process of collision between old and new experiences. Its main character is cramming and instilling education. It is the process in which teachers send theoretical knowledge to students in a planned way, so that students can establish a correct outlook on life and values, and it is a process of convincing people and implanting specific ideas. Its learning ability and imitation ability are small, so in the particle swarm algorithm, its learning factor weight is relatively small. It can help the lack of self-learning particles to implant a fixed awareness, so that their learning ability is improved.

4.3. Adaptive Adjustment of Parameters. The most important and most sensitive parameters of the positive and negative excitation PSO algorithms are ω and c_1, c_2 . The parameter settings for the particle swarm algorithm are usually set based on experience. The problem that the optimal solution of the algorithm will produce oscillation cannot be completely solved, which will slow down the convergence speed and affect the global search. Therefore, it is necessary to adaptively adjust and optimize these parameters to improve the accuracy.

Positive reinforcement refers to the time when the effect of education is relatively good, and measures are taken to strengthen it. It is an education based on student activities that are reinforcing behaviors. The reinforcement theory was proposed by American behavioral psychologist Skinner. He believed that Pavlov was a reactive operation to the "dog bell saliva" secretion test, which was a passive reaction. It is the purpose of the person to propose the target behavior, and the third person's reinforcement or regression will increase or decrease the target behavior. In the daily development of ideological and political education activities, there are usually two problems. On the one hand, some student activities are carried out because there is no application for comprehensive evaluation points, and student participation is very low. On the other hand, some students' activities are empty, the form is boring and unattractive, and even if there is a comprehensive evaluation score, it is impossible to attract students to the scene, and the effect is not good. The

main position of college students' ideological and political education activities is activities, which can achieve positive effects through activities. By participating in activities, students can realize their own value, strengthen their recognition of themselves, and achieve the ideal effect of positive reinforcement.

The negative reinforcement behavior is based on the management rules for college students' disciplinary action. Negative reinforcement behavior has always been a means used by educators cautiously. However, when negative models cannot be negatively strengthened, other companions will adjust their status according to the location and status of the surrounding students, which will have a negative impact on the entire group. The rules for the management of college students' disciplinary actions are the negative reinforcement tools for college students' ideological and political education, and they are also negative evaluations and incentives for college students' negative behaviors. Not all negative reinforcements can act as incentives. If the college student disciplinary regulations only punish the negative behavior of college students and the students do not lose the evaluation or participate in the scholarship selection rights, then such negative reinforcement cannot play an incentive role. Therefore, whether negative reinforcement can play an incentive role will depend on the nature of negative reinforcement. The correct use of negative reinforcement tools and methods is conducive to the evaluation and motivation of individual and group behavior.

5. Conclusion

The group of college students is very complex. If it is regarded as a system, the system will make corresponding changes according to the changes of environment and the needs of task objectives. Through the change of knowledge and experience a person has learned, his behavior will also change. In this paper, positive and negative excitation measures are introduced in the experimental research, and the particle swarm optimization evaluation function and behavior weighting factor are analyzed to hypothetically describe the working method. It is pointed out that the educational working methods should be adjusted in time according to the changes of student groups and individual behaviors, so as to achieve good work results. Inspired by the PSO model, the group consciousness behavior of college students is modeled. Positive and negative incentives are introduced into the model. Introducing positive incentives is better than not introducing any incentives. It cannot help them enter the optimal state of consciousness. In view of this incentive effect, positive and negative incentive work strategies are actively introduced. Also, carefully use negative incentives alone, innovate work ideas, and implement the reverse application of positive and negative incentives to improve the work strategy of ideological and political education. Ideological and political education activities for college students are activities that have achieved positive and typical effects through practical activities. By

participating in activities, students can realize their own value, enhance their understanding of themselves, and achieve the ideal effect of positive reinforcement.

Data Availability

The experimental data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The author declares that there are no conflicts of interest.

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