Hindawi
Advances in Multimedia
Volume 2023, Article ID 9760509, 1 page
https://doi.org/10.1155/2023/9760509

Retraction

Retracted: In the New Multimedia Era, "Post-90s" Counselors Do a Good Job of Adaptive Education Path Research for "Post-00s" Freshmen

Advances in Multimedia

Received 15 August 2023; Accepted 15 August 2023; Published 16 August 2023

This article has been retracted by Hindawi following an investigation undertaken by the publisher [1].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.

References

[1] T. Wang, "In the New Multimedia Era, "Post-90s" Counselors Do a Good Job of Adaptive Education Path Research for "Post-00s" Freshmen," *Advances in Multimedia*, vol. 2022, Article ID 4146517, 10 pages, 2022.

Hindawi
Advances in Multimedia
Volume 2022, Article ID 4146517, 10 pages
https://doi.org/10.1155/2022/4146517

Research Article

In the New Multimedia Era, "Post-90s" Counselors Do a Good Job of Adaptive Education Path Research for "Post-00s" Freshmen

Ting Wang

Weinan Normal University, Weinan, Shaanxi 714099, China

Correspondence should be addressed to Ting Wang; wangting@wnu.edu.cn

Received 16 July 2022; Revised 1 August 2022; Accepted 5 August 2022; Published 26 August 2022

Academic Editor: Tao Zhou

With the rapid development of network technology, all kinds of new media continue to emerge, and the "full-scale" zero-day difference of new media communication breaks through the scale of time and space. The era has come full circle. Today, "post-90s" counselors have gradually become the backbone of college counselors. At the same time, "post-00s" college students have gradually entered the campus and become the main force on campus. Counseling is a traditional profession. In the new era and new starting point, when the "post-00s" college freshmen begin to step into college campuses, how should the new counselors of the "post-90s" get along with them? The author believes that it is necessary to inherit the fine traditions, combine the characteristics of the times and the characteristics of new students, develop and innovate, pay close attention to the style of study, deepen the students, cultivate the backbone, work together at home and school, and study at all times so as to provide the source of living water and motivation for the growth of students. In the first month of college freshmen entering the school, they are still in the stage of exploration and adaptation, their study and living habits are not fixed, their learning methods have changed from supervised passive learning to conscious and active learning, and their lifestyles are also dominated by self-planning and self-management. After the "fresh period," many freshmen show negative characteristics, such as weak self-discipline, laziness, and slack, and are full of confusion and contradictions. Guilt for not making progress. The decision at this stage is particularly important for freshmen to successfully complete their studies and discover their own value. Therefore, in view of the situation that freshmen cannot adapt to the new environment as soon as possible after being separated from the familiar environment, we should guide students to establish a positive learning and life attitude in the university from multiple angles, all-round and multiple ways, and integrate into the new life as soon as possible. This paper introduces the research status of ant colony algorithm and the existing path planning algorithms and space planning methods. Combined with the relevant knowledge of graph theory, the grid method is used to establish a space model.

1. Introduction

College counselors are responsible for the daily ideological and political education and management of college students [1]. They are not only "guides" for educating students, but also "servicers" for student management [2]. In the "Professional Competence Standards for Counselors in Colleges and Universities (Interim)" issued by the Ministry of Education on the professional competence standards for online ideological and political education, counselors at the primary, intermediate, and advanced vocational levels have work content and guidance related to online public opinion [3]. As the backbone of ideological and political education for college students, counselors are the organizers, implementers, and instructors of effectively carrying out adaptive education for college students. They play the role of "gatekeeper" in the guidance of entrance education and should assume the responsibility of correctly guiding college entrance education. At the same time, they play the roles of "information receiver," "information processor," and "information disseminator" in the guidance of public opinion. Therefore, college counselors have an important role and status in the guidance of network public opinion.

With the popularization of the Internet and more and more attention being focused on the innovation of ideological and political work in colleges and universities, most

of the freshmen enrolled in the past two years have been "post-00s," who are familiar with new media [4]. Ideological and political education work has higher new requirements, new tasks, and new missions [5]. The improvement of counselor's ideological and political work publicity ability is of great practical significance for improving the counselor's educational ability and ability in the new era and improving the effectiveness of ideological and political education in colleges and universities [6].

Because of the time background of "post-00" college students, most of these children are only children. Their parents attach great importance to it. Children do not have time for independent development. Children are too dependent on others, and they are used to being helped by others to take care of everything. For newcomers who have just entered colleges and universities, these disharmonious feelings often cause confusion, worry, and anxiety during the transition period. Facing the sudden social environment, students will not quickly enter a safe stage of study and survival. This requires school counselors and teachers to do more psychological counseling for students and chat with students so that students can quickly join new groups and new environments.

With the increasing development of modern science and technology, road planning technology has become one of the research and development priorities in the field of artificial intelligence, which mainly involves smart city transportation, logistics distribution, workshop work, robot obstacle avoidance, GPS satellite navigation, UAV flight, and so on; basically, all the design problems of point-to-surface systems that can be deployed can be realized by road planning technology, and path planning technology has also become a key technology in many fields [7].

Therefore, this paper aims at the "post-90s" counselors in the multimedia era, and the path of adaptive education for "post-00s" freshmen is unclear, and they do not know the specific direction of education work. The ant colony algorithm is used to guide the "post-90s" counselors in the multimedia era, as well as planning and analyzing the path of adaptive education for "post-00s" freshmen.

2. State of the Art

2.1. The Current Status and Characteristics of the "Post-90s" Counselor Team. There is little difference between the age of post-90s counselors and the actual age of post-00s college students [8, 9]. They have a lot in common, which can shorten the spiritual distance between students [10]. Compared with the "post-80s" and other senior counselors, most of the "post-90s" counselors have just stepped out of the campus [11, 12].

"Post-90s" counselors have experience in becoming school leaders or organizing school sports [13]. They can not only observe problems from the perspective of students, but also be good at communicating with students in work. The same training environment allows students to know the problems that college students may face at all stages of the university and can more effectively educate and guide students. Post-90s counselors can also often communicate with students, find problems in time, care about students' dynamics, and guide students' growth and success.

The "post-90s" counselors who grew up in the Internet age have strong adaptability and learning ability for new things [14]. Particularly, in the self network period, students are more willing to contact students through network tools and care about their ideological trends through multiple channels, angles, and aspects [15]. It can not only innovate the way of work and improve efficiency, but also shorten the relationship between teachers and students.

2.2. Characteristics of "Post-00" College Students. In May 2018, Tencent social insights cooperated with Tencent's application analysis and experience design department. Based on Tencent's social big data analysis technology, through in-depth interviews, WeChat interviews, questionnaires, and other multilevel in-depth research, a large number of "Post-00" personal characteristics will be found [16].

The Tencent Post-00 report shows that the growth conditions of the "Post-00" are generally superior, and the conditions are better than those of the "post-90" in all aspects. Children's growth is characterized by low class mobility, superior material culture, explosive information on mobile networks, exclusive love of parents, heavier educational pressure, and more democratic family education and campus discipline [17]. The economic conditions of the Post-00 generation are generally good, and the economic dividends they can obtain have increased significantly. Compared with the post-90s generation, the material desire of "00s" is significantly reduced, but the longing for life is becoming more and more vague, and there is more loneliness and no sense of direction in life.

The special growth environment has cultivated the independent values of the "post-00s." According to social chemistry, people will produce certain values in the process of development to meet the social needs of the social environment [18], namely, self-awareness (define yourself according to the opinions and achievements in a field), reality (actively obtain resources to develop your field), adaptation (accept the differences between peers and yourself), adaptation (know who to show what image), equality (talk to anyone in the same way), care (care about your team) [19], and so om. The lifestyle of "post-00" groups living in various cultural exchanges is richer and more diverse, so it is reflected in the "post-00" ideology, that is, more diversified.

Because "post-00" college students grew up in a more favorable environment in society, they have been cared for and cared for by their parents since childhood, and their growth process is relatively stable [20]. After going to college, the ability of "post-00s" who lack parental support to deal with setbacks is weakened, the support of teachers and friends is less, and the psychological carrying capacity is relatively fragile, which is prone to mental health problems.

2.3. The "Post-90s" Counselors Should Do a Good Job of the "Post-00s" Freshman Entrance Education Countermeasures. Faced with the lack of independence, self-awareness and learning ability of "post-00" freshmen, school counselors and

teachers should carry out "student military training teaching," "professional knowledge promotion speech," and "career planning" with freshmen's adaptability as the main body and communicate with them in the school so that they can have a clearer understanding of the relevant situation of the school so as to improve their preliminary understanding of the school. Military training in the first year of college is very important. The purpose of military education training is to teach students how to behave, how to bear hardships and stand hard work, how to face risks, and how to master the yardstick between their ability and discipline. The main purpose of military training is to promote the cultivation and development of students' spiritual character and further improve students' self-care ability in life by training students' strong hardness and indomitable will quality and strengthening students' physique at the same time. Moreover, by training students to earn their own living and think independently, they can help students form strict self-discipline habits. Therefore, through timely pre military training education, students can understand the importance and value of military education, which can not only eliminate the students' negative mentality, but also enable students to adapt to the military education life in time. Most of the common problems and discomfort among students are unchanged learning methods, aimless reading, procrastination, and so on. Students' learning enthusiasm is not high, but their basic ideas still maintain the level of high school class teachers guiding their learning. Therefore, in order to enhance their own learning ability and enthusiasm, school counselors should actively carry out educational activities on their career planning and lectures on professional skills so that children can set clear life goals as soon as possible and find their own way forward in the relatively diversified school life. At the same time, the school should also hire senior students or senior students to come to the school to attend the lectures. Because there is little difference between them and the "post-00" students, their acceptance of students is also higher, and the results are more obvious. It helps junior and senior students understand career trends and scientifically plan their career. At the same time, it strengthens the detailed goals of life and learning, self-study in the morning and evening, student management, and so on.

Every post-00 generation has its own lofty ideals and pursuits. Some of them can achieve their goals in the normal way, but others fail in the fifth way. Today, it is urgent to carry out ideal and belief education for teenagers. Cultivating a good outlook on faith requires not only the unremitting struggle of teenagers, but also the practical and step-by-step practice of teenagers. Knowledge is the stepping stone to cultivate good ideals and beliefs. In the long life course, learning is undoubtedly the most critical stage foundation. Learning is the only way to truly understand Marxism and correctly understand the laws of history. Members of the Communist Party of China have been serving the people wholeheartedly for nearly 90 years. Teenagers learn from the Communists the spirit of selfless dedication and unrepentant dedication, actively spread the communist red culture, always have a heart of admiration, seriously learn from the martyrs, publicize the martyrs, and protect the meritorious heroes.

3. Methodology

3.1. Path Planning Environment Modeling. In order to make the "90" counselor after "00" new adaptive education, promote "00" new mental health, and let them faster into the university life, this paper uses the ant colony algorithm of "90" counselor "after" 00 "new adaptive education path planning analysis, in order to get" 90 "counselor after" 00 "the optimal path of new adaptive education.

Route design means that assuming that the object is in the natural environment, no matter the obstacles in the environment are known or unknown, stationary or moving, animals can avoid the obstacles with the least or low cost (time, space or energy, etc.) and find the route from the starting point to the target location.Therefore, before planning the path of the "post-900" counselors, it should first make clear the basic means of the "post-900" counselors' adaptive education, and the ultimate purpose of adaptive education with traditional methods and different results of different methods. Put the above information together.

Route planning means that the object is in an environment, no matter the obstacles in the surrounding environment are known or unknown, static or moving, the object must avoid the obstacles at the least or a small cost (time, space or energy, etc.) and find a route from the starting point to the target location.Therefore, before carrying out path planning, first of all, it is necessary to clarify the space size of the object movement. All objects in the space include the size and position of obstacles and the position of the starting point and the target point. The process of synthesizing the above information is the path planning environment modeling. Before making the path planning of "post-90s" adaptive education in the path of "post-00s" freshmen, we should first make clear the ultimate goal of adaptive education for "post-90s" counselors, traditional methods, and different results of different methods.

The path planning of the post-90s counselors for the post-00s freshmen adaptive education requires various methods of path planning. The data encoding method in the grid method in this paper adopts direct encoding, which is stored in the computer in the form of a matrix. The matrix representation in graph theory is used here. The matrix representation of graphs mainly includes adjacency matrix and reachability matrix. The adjacency matrix is used in this article.

Adjacency matrix is a matrix that describes the adjacent relationship between points. Let $G = (V, E)$ have a graph, where $V = \{V, V\}$, which is used to store all vertex data in the graph, and and E is used to represent the adjacency matrix. The data storing the relationship between vertices is the set of all edges. If the matrix $D = \{d_{ij}\}$ is used to represent the adjacency matrix of G, there are

$$d_{ij} = \begin{cases} 1, \text{When } \left(v_i, v_j\right) \in E, \\ 0, \text{When } \left(v_i, v_j\right) \notin E. \end{cases} \quad (1)$$

First, the two-dimensional space is divided by grids of the same size. In this paper, the planning space is divided

into 20×20 grid space, and the label of each grid adopts the direct coding method. The divided space is shown in Figure 1. The simulation experiment in this paper Two different obstacle environment spaces are used, as shown in Figure 2.

In Figure 1, the lower left corner of the grid matrix is the origin of coordinates; the horizontal right direction and the vertical upward direction are the positive direction of the x-axis and the positive direction of the y-axis, respectively. According to the grid number, the corresponding coordinate position of each node can be obtained. Suppose a grid number is n, and the corresponding coordinates of the grid are (x, y), and the relationship between them is as follows.

$$\begin{cases} x = 0.5 + \operatorname{mod}(n-1, N_x), \\ y = 0.5 + \dfrac{(n-1)}{N_x}. \end{cases} \tag{2}$$

In the formula, N_x is the maximum number of grids in the horizontal direction, and mod represents the remainder operation.

First of all, to evaluate whether a path is an optimal path in path planning, it is necessary to compare the length of the path and also need to consider the energy consumed by the moving object. For other conditions, the cost function is as follows.

$$C = L + \beta_1 * G + \beta_2 * P. \tag{3}$$

Among them, C represents the total cost of the path, L represents the length of the path, and G and P represent the path length, respectively. The number of grids passed and the number of turning points, $\beta 1$ and $\beta 2$, are weight coefficients, and their sum is 1.

3.2. Summary of the Ant Colony Algorithm and Its Research in the Path Planning of the Post-90s Counselors' Freshmen Adaptive Education. Observing the behavior of real ants in nature, people often can see such a situation: Although the main food source of bowback ants is always randomly distributed near Dongguan ant nest technology business incubator company, ants will soon find the shortest way to find food sources from Dongguan ant nest technology business incubator company. When the environment changes, the ant colony can adapt to its changes and find a new shortest path.

The "Asymmetric Double Bridge Experiment" conducted in 1989 further studied the foraging behavior of ants. Because "90" counselors need to do better in the "00" new adaptive education, which requires good short-term results, thus new mental health problems must be valued and solved, so based on the analysis of the colony algorithm, it can be seen that the colony algorithm for "90" counselor after "00" new adaptive education path planning is feasible. As shown in Figure 3, the nest and the food source are connected by asymmetric double bridges. Figure 3(a) shows the size of the asymmetric bridge in the experiment. In Figures 3(b) and 3(c) are the activity distribution of ants four minutes and eight minutes after the completion of the experiment, respectively.

Ant colony algorithm was originally used to solve the traveling salesman problem, and it has achieved good results in solving the TSP problem. The shortest path traversed is required. The flowchart of the basic ant colony algorithm path planning application is shown in Figure 4. Here, the mathematical model of the ant colony algorithm is explained through the TSP problem.

The tabu table tabuk is used to record the cities that ant k has traveled. If all cities are included in the tabuk table, then the traversal is over, and the transfer of ant k from city i to city j is determined by the transition probability, which is related to the pheromone on the path. The concentration is related to the heuristic information, and the state transition probability is calculated as follows:

$$P_{ij}^{k}(t) = \begin{cases} \dfrac{\left[\tau_{ij}(t)\right]^{\alpha}\left[\eta_{ij}(t)\right]^{\beta}}{\sum_{s \in llowed_k}\left[\tau_{is}(t)\right]^{\alpha}\left[\eta_{is}(t)\right]^{\beta}}, & j \in \text{allowed}_k \\ 0 & \text{other} \end{cases} \tag{4}$$

The ant needs to update the pheromone on the path after each step or after a traversal (visiting n cities); this is to prevent too many pheromones remaining on some paths and the heuristic information cannot work. The element update rules are as follows:

$$\%\ \tau_{ij}(t+n) = (1-\rho) \cdot \tau_{ij}(t) + \Delta\tau_{ij}(t), \tag{5}$$

$$\Delta\tau_{ij}(t) = \sum_{k=1}^{m} \Delta\tau_{ij}^{k}(t). \tag{6}$$

In equation (5), ρ is pheromone volatilization coefficient and $1 - \rho$ is the pheromone residual coefficient.

For the different types of pheromone update modes, M. Dorigo gives three different basic ant colony calculation modes, namely, ant cycle mode, ant number mode, and ant density mode. The main difference of the model is that the search method is different.

$$\Delta\tau_{ij}^{k}(t) = \begin{cases} \dfrac{Q}{L_k} & \text{if the } k\text{th ant goes from } i \text{ to } j \text{ between time } t \text{ and } t+1 \\ 0 & \text{otherwise} \end{cases}, \tag{7}$$

$$\Delta\tau_{ij}^{k}(t) = \begin{cases} \dfrac{Q}{d_{ij}} & i\text{f the } k\text{th ant goes from } i \text{ to } j \text{ between time } t \text{ and } t+1 \\ 0 & \text{otherwise} \end{cases}, \tag{8}$$

$$\Delta\tau_{ij}^{k}(t) = \begin{cases} Q & \text{if the } k\text{th ant goes from } i \text{ to } j \text{ between time } t \text{ and } t+1 \\ 0 & \text{otherwise.} \end{cases} \tag{9}$$

Q in formulas (3)–(7), formulas (4)–(8), and formulas (5)–(9) is the pheromone intensity, L_p in formula (3) represents the total length of the path taken by the kth ant in this

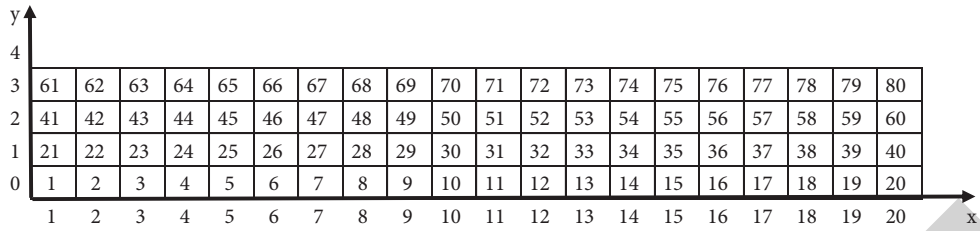

Figure 1: The grid method divides the space.

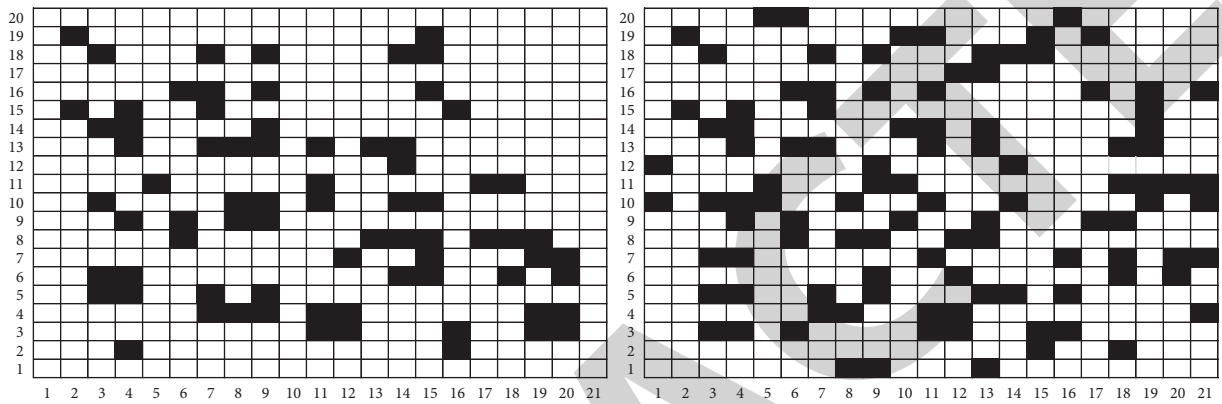

Figure 2: Path planning diagram.

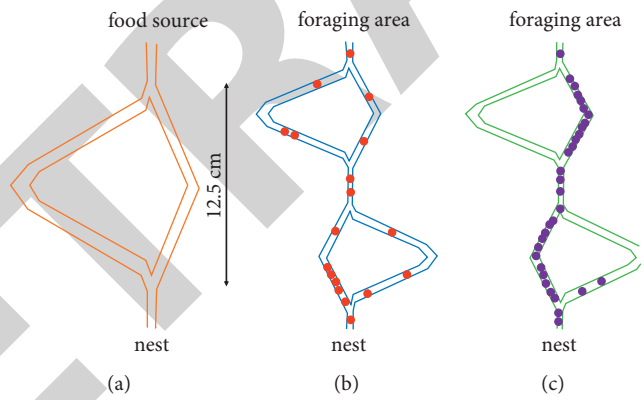

Figure 3: "Double bridge" experiment of ant colony foraging.

cycle, and d_{ij} in formula (9) represents the path length from city i to city j.

Because the ant colony algorithm itself still has some disadvantages, the ant colony algorithm needs to improve the algorithm when the "post-90s" counselors make the path planning of "post-00s" freshmen adaptability education.

The ant system with the elite strategy is the earliest improved ant system. The basic idea of the algorithm is to perform additional pheromone updates for the paths traversed by the elite ants after each path search iteration is completed. The elite ants are the most advanced ants in this iteration. For the ants on the optimal path, the pheromone update method of the ant system with the elite strategy is as follows:

$$\tau_{ij}(t+1) = (1-\rho)\cdot\tau_{ij}(t) + \Delta\tau_{ij} + \Delta\tau_{ij}^{*},$$
$$\Delta\tau_{ij} = \sum_{k=1}^{m}\Delta\tau_{ij}^{k}. \tag{10}$$

The ranking-based ant system is an improved ant system proposed on the ant system with an elite strategy. In the ranking-based ant system, the pheromone update method is expressed as follows:

$$\tau_{ij}(t+1) = (1-\rho)\tau_{ij}(t) + \Delta\tau_{ij} + \Delta\tau_{ij}^{*},$$
$$\Delta\tau_{ij} = \sum_{m=1}^{w}\Delta\tau_{ij}^{m}. \tag{11}$$

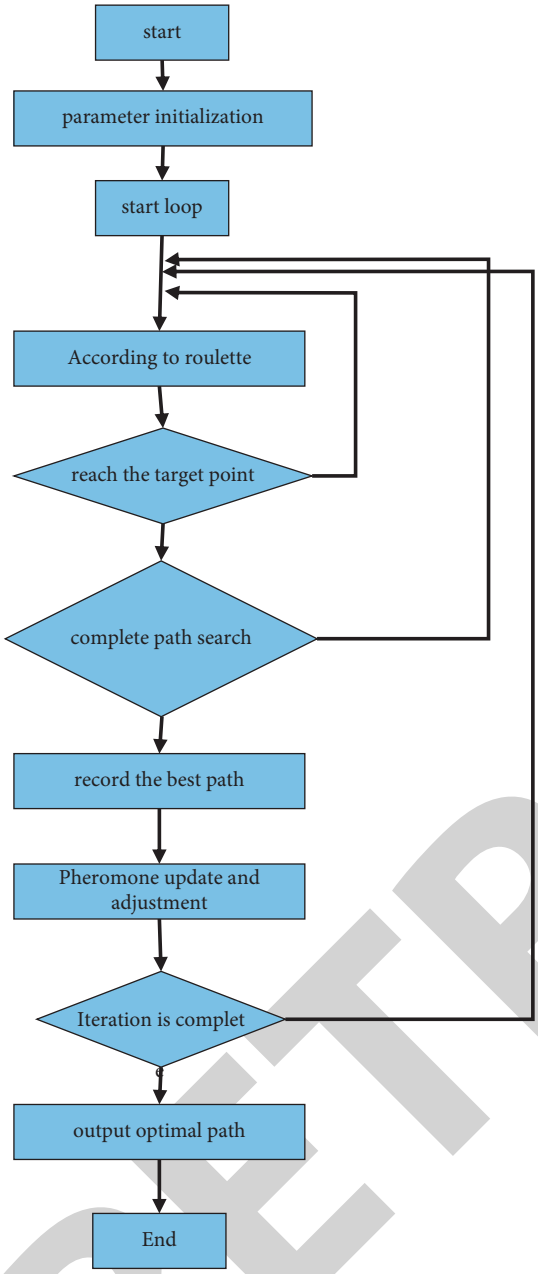

Figure 4: Flowchart of basic ant colony algorithm path planning application.

4. Result Analysis and Discussion

4.1. The Ant Colony Algorithm Is Used for the Parameter Analysis of the Path Planning of the Post-2000s Freshmen Adaptive Education. After the introduction of basic ant colony algorithm, the largest minimum ant colony algorithm and ant colony algorithm in the path planning application process, in order to verify the two ant colony algorithms in "90 after" counselor "00 after" new adaptive education on the feasibility of path planning, this paper is the example simulation and comparative analysis, simulation is based on MATLAB, and the subsequent chapters of the simulation software are the same. The path planning environment is modeled using the grid method, which is introduced according to Section 2.2. The planning environment is two 20×20 random obstacle grid areas, and the starting point and end point coordinate parameters are shown in Table 1.

Table 1: Parameters of start and end points of path planning.

	Coordinate	
	Obstacle environment 1	Obstacle environment 2
Starting point	(0.5, 19.5)	(0.5, 0.5)
End point	(19.5, 0.5)	(19.5, 19.5)

In the first obstacle environment, a series of simulation experiments are used to analyze the parameter values of the basic ant colony algorithm and the maximum and minimum ant colony algorithm, and the algorithm value method is similar in other obstacle environments.

4.2. Experiment Results and Analysis. It can be seen from the ant colony algorithm that the number m of ants determines the number of feasible optimal solutions. The larger the value of m, the more feasible optimal solutions and the more accurate the obtained optimal solutions, and the better the global search effect of the algorithm and the stability of the algorithm. Therefore, it is necessary to set an appropriate number of ants m. The following is a simulation analysis of the basic ant colony algorithm under the condition that other parameters remain unchanged and the number of ants m is different. 20 simulations are carried out for each number of ants, and the path cost, path length, and number of iterations are taken from 20 experiments. The average value of the simulation results is shown in Table 2 and Figure 5.

Through the analysis of Table 2 and Figure 5, it can be seen that when the number m of ants is 50, the number of iterations of the algorithm is the least, and the cost corresponding to the optimal path is also the smallest. Therefore, when simulating in the first obstacle environment, the basic ants number is relatively stable. The ant colony number m used by the colony algorithm and the maximum and minimum ant colony algorithm is 50.

In the process of researching the optimal combination of the information heuristic factor and expectation factor of the basic ant colony algorithm and the maximum and minimum ant colony algorithm, other parameters remain unchanged, and the different information heuristic factors and expectation factors in the two algorithms are combined in the path. The role in planning is shown in Tables 3 and 4. Twenty simulations were performed for each parameter combination, and the path cost, path length, and number of iterations were averaged over 20 experiments.

It can be seen from Tables 3 and 4 that when the heuristic factor a and the expectation factor β are the combination 6, the maximum and minimum ant colony algorithm can find the path with the smallest cost and the shortest length and converge at a faster speed. Therefore, in the first obstacle during simulation in the environment, the value of a of the maximum and minimum ant colony algorithm is 0.95, and the value of β is 7.0.

Table 2: Influence of the number of ants m on the performance of the algorithm.

Number of ants	Path cost	Path length	Number of iterations at convergence
10	51.1204	29.8012	38
20	50.0012	29.8012	40
30	48.6921	29.8012	38
40	46.5505	29.8012	35
50	46.5876	29.8012	30
60	49.2515	29.8012	31
70	49.1221	29.8012	31
80	49.1221	29.8012	30

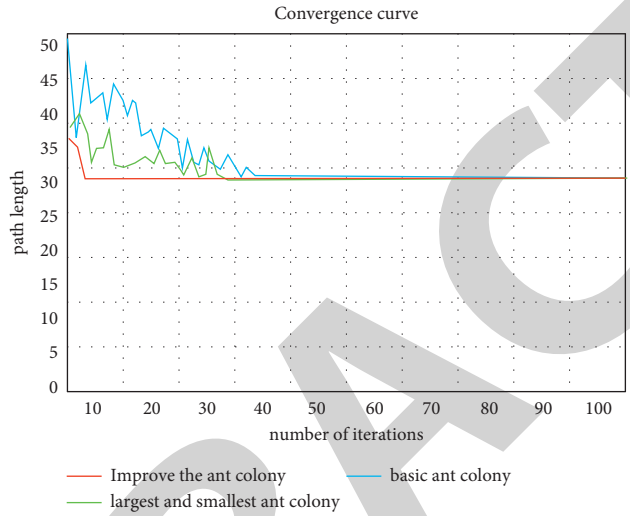

Figure 5: Curve diagram of the number of ants and the number of convergence times.

Table 3: Effects of different α and β combinations on the basic ant colony algorithm.

Combination	α	β	Path cost	Path length	Number of iterations at convergence
1	1.00	6.05	50.6023	31.2278	95
2	1.00	6.66	50.6678	30.3950	88
3	1.00	7.01	50.2324	29.8014	80
4	1.00	7.54	49.2581	29.8014	78
5	1.00	8.20	50.7018	29.8014	98
6	1.00	7.60	50.3257	29.8014	55
7	1.00	7.60	49.4343	29.8014	52
8	1.00	7.60	47.2622	29.8014	40
9	1.00	7.60	51.3271	30.4014	38
10	1.00	7.60	53.2522	32.1025	96

Table 4: Influence of different α and β combinations on the maximum and minimum ant colony algorithm.

Combination	α	β	Path cost	Path length	Number of iterations at convergence
1	0.79	7.60	50.6574	29.8014	98
2	0.83	7.51	50.7607	29.8014	95
3	0.88	7.43	50.2242	29.8014	50
4	0.92	7.33	48.7607	29.8014	33
5	0.95	7.20	49.1484	29.8014	32
6	0.97	7.11	48.2591	29.8014	30
7	0.97	6.99	50.2242	30.3848	38
8	0.97	6.85	50.9526	30.3848	40
9	0.97	6.71	49.9768	30.6274	38
10	0.97	6.62	48.3275	32.0416	32

Table 5: Effects of different ρ and Q combinations on the basic ant colony algorithm.

Combination	ρ	Q	Path cost	Path length	Number of iterations at convergence
1	0.11	1.19	49.1221	29.8014	82
2	0.25	1.11	49.8654	29.8014	40
3	0.32	1.02	48.3369	29.8014	30
4	0.32	0.95	49.1577	29.8014	30
5	0.32	0.81	49.2651	29.8014	32
6	0.45	0.81	49.1374	29.8014	45
7	0.56	0.81	49.1590	29.8014	60

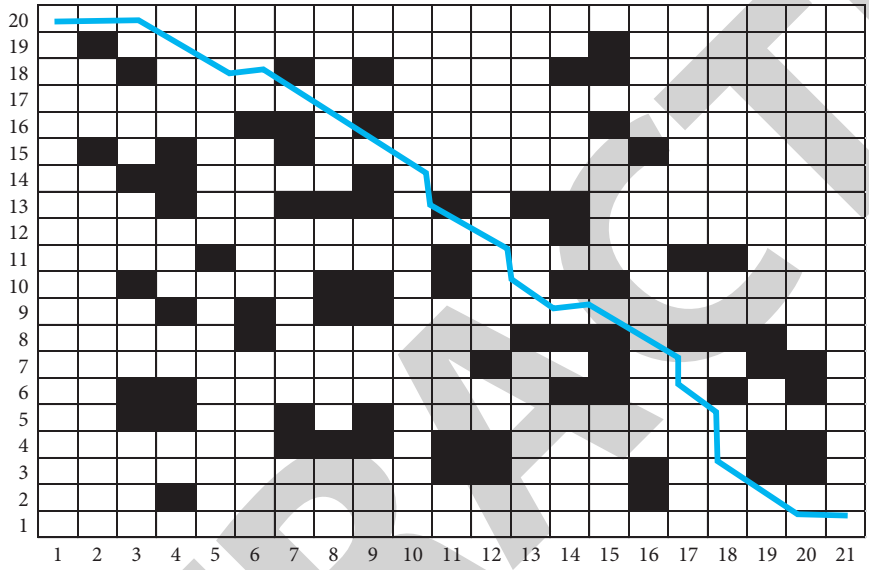

Figure 6: Basic ant colony algorithm path planning optimal path.

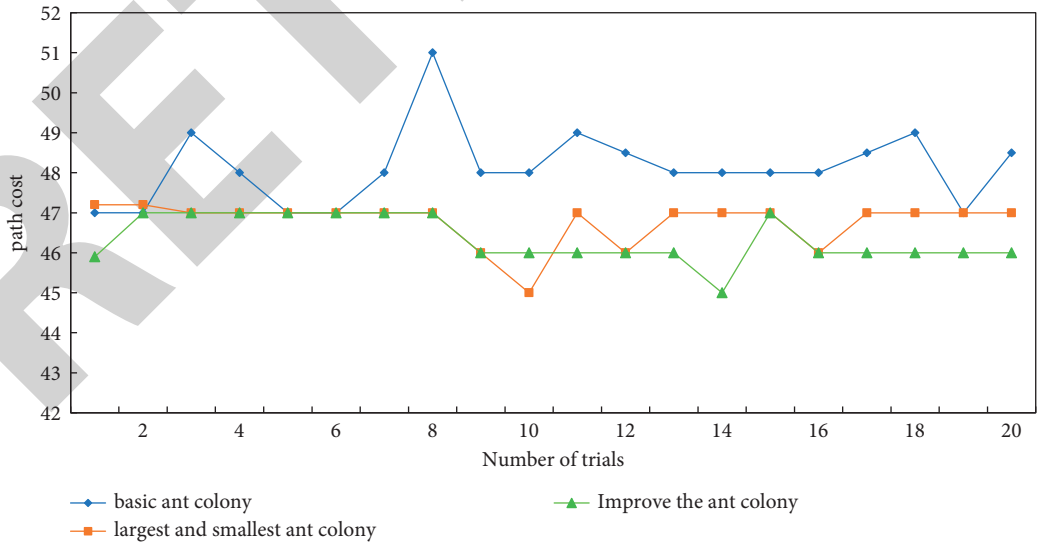

Figure 7: Path cost diagram of each ant colony algorithm.

Since the functions of each parameter in the ant colony algorithm are actually interrelated, this paper sets the pheromone volatility factor p and the pheromone intensity factor Q in combination. The experimental data of different parameter combinations in the basic ant colony algorithm are shown in Table 5.

Figure 6 shows the optimal path for basic ant colony algorithm path planning. The optimal path length and grid number found by basic ACA and MMAS are equal, but their inflection points are 14 and 12, respectively, so the corresponding costs are different. The costs corresponding to the optimal paths found by the two algorithms are 46.9989 and 44.7989, and the optimal path convergence times of the MMAS algorithm is 33 times, which is less than 42 times the optimal path convergence times of the basic ACA, indicating that the MMAS algorithm can find a better solution than the basic ACA, and the convergence speed is faster. This also shows that the MMAS algorithm is more suitable for the post-90s counselors to do the path planning of the post-00s freshmen adaptive education.

When using basic ant colony algorithm, maximum and minimum ant colony algorithm, and improved ant colony calculation to realize path planning simulation, the broken-line diagram of path cost and convergence iteration times in each experiment is shown in Figure 7. Whether it is the maximum or minimum value, or starting from the average value of all variances of the value, the path length, cost, and iteration times planned by the improved ant colony algorithm are better than those by the basic ant colony algorithm and the maximum and minimum ant colony algorithm. When these three ant colony calculation methods are used for path planning, the convergence rate of improved ant colony calculation is much higher than that of improved ant colony method. Basic ant colony computing has a higher convergence rate than maximum or minimum ant colony computing. In most cases, the path found is shorter and the cost is lower. This shows that using the improved ant colony algorithm to properly educate post-90s counselors can find the most appropriate strategy in a short time and can be used to deal with the more urgent mental health problems of post-90s freshmen.

5. Conclusion

When using basic ant colony algorithm, maximum and minimum ant colony algorithm and improved ant colony calculation to realize path planning simulation, the broken-line diagram of path cost and convergence iteration times in each experiment is shown in Figure 7. Whether it is the maximum or minimum value, or starting from the average value of all variances of the value, the path length, cost, and iteration times planned by the improved ant colony algorithm are better than those by the basic ant colony algorithm and the maximum and minimum ant colony algorithm. When these three ant colony calculation methods are used for path planning, the convergence rate of improved ant colony calculation is much higher than that of improved ant colony method. Basic ant colony computing has a higher convergence rate than maximum or minimum ant colony computing. In most cases, the path found is shorter and the cost is lower. This shows that using the improved ant colony algorithm to properly educate post-90s counselors can find the most appropriate strategy in a short time and can be used to deal with the more urgent mental health problems of post-90s freshmen.

Data Availability

The labeled data set used to support the findings of this study is available from the corresponding author upon request.

Conflicts of Interest

The author declares that there are no conflicts of interest regarding the publication of this paper.

Acknowledgments

This work was supported by 2020 General Special Scientific Research Plan Project of Shaanxi Provincial Department of Education (Project name: Research on the Path of Adaptability Education for Post-90s Freshmen by "Post-90s" Counselors in the New Era; topic no.: 20jk0133).

References

[1] C. Wu, "Research on the internationalization strategy of higher education under the background of network education," *Applied Bionics and Biomechanics*, vol. 1, p. 5, Article ID 9352275, 2022.

[2] Z. Wen, N. Xingwang, and L. Sen, "Research on the identity of college students' socialist core values based on the perspective of peer counseling[J]," *Frontiers in Educational Research*, vol. 5, no. 4, 2022.

[3] E. Nazarova, A. Butyaev, and M. Y. Bouaouina, "Adaptive instructional system for complex equipment trainings in the post-covid era: breaking the ice of time-consuming tasks[J]," *Journal of Affective Disorders*, vol. 9, no. 9, pp. 81–90, 2022.

[4] L. S. Griffin, "Nationalism in Japanese new religions: what are the national conceptions of Japanese new-new religion in the post-bubble era? A case study of konohana family community [J]," *Journal of Sociology and Anthropology*, vol. 5, no. 1, pp. 17–24, 2021.

[5] X. Qi, B. Jiang, and T. Wu, "Genomic dissection of widely planted soybean cultivars leads to a new breeding strategy of crops in the post-genomic era[J]," *The Crop Journal*, vol. 9, no. 4, pp. 36–40, 2021.

[6] J. S. Migdal, "Exercise of power: American failures, successes, and a new path forward in the post-cold war world," *Israel Journal of Foreign Affairs*, vol. 8, no. 2, pp. 16–20, 2021.

[7] S. Ren, Y. Li, X. Lu, and F. Xu, "How do first-year students perceive learning support services in Chinese university libraries?" *Journal of Librarianship and Information Science*, p. 096100062110533, Article ID 096100062110533, 2021.

[8] X. Li, Y. Wang, and G. Liu, "Structured medical pathology data hiding information association mining algorithm based on optimized convolutional neural network," *IEEE Access*, vol. 8, no. 5, pp. 1443–1452, 2020.

[9] D. Schmand, M. Schrder, and L. V. Koch, "A greedy algorithm for the social golfer and the oberwolfach problem[J]," *Journal of Affective Disorders*, vol. 6, no. 1, pp. 77–85, 2020.

[10] H. Zamani, M. H. Nadimi-Shahraki, and A. H. Gandomi, "Starling murmuration optimizer: a novel bio-inspired algorithm for global and engineering optimization," *Computer Methods in Applied Mechanics and Engineering*, vol. 392, no. 2, p. 114616, Article ID 114616, 2022.

[11] A. H. Mendrofa and A. Muis, "Serial manipulator control optimization using ant colony algorithm," *Journal of Physics:*

Conference Series, vol. 1993, no. 1, p. 012026, Article ID 012026, 2021.

[12] S. Mjahed, K. Bouzaachane, and A. T. Azar, "Hybridization of fuzzy and hard semi-supervised clustering algorithms tuned with ant lion optimizer applied to Higgs boson search[J]," *Computer Modeling in Engineering and Sciences*, vol. 6, no. 11, p. 36, 2020.

[13] P. Oslington, "Review of Paul S. Williams, exiles on mission: how christians can thrive in a post-christian world[J]," *Journal of Affective Disorders*, vol. 6, no. 1, pp. 77–87, 2020.

[14] M. Atlagh and L. Tamnine, "Staff motivation factors in the public sector - case of public education professionals in Morocco: modeling test[Les facteurs de motivation du personnel dans le secteur publiccas des professionnels de l'enseignement public au Maroc: essai de modélisation," *Post-Print*, vol. 9, no. 10, pp. 188–194, 2021.

[15] M. Honda, N. Inoue, and M. Liverani, "Lessons learned from the history of postgraduate medical training in Japan: from disease-centred care to patient-centred care in an aging society[J]," *Human Resources for Health*, vol. 20, no. 1, pp. 94–100, 2022.

[16] W. Li, F. Li, and W. X. Cai, "Research on the development needs of young postgraduate tutors in colleges and universities in the new era[J]," *DEStech Transactions on Social Science Education and Human Science*, vol. 9, no. 8, pp. 72–82, 2020.

[17] R. Ciliberti, A. Bonsignore, C. Bonzano, F. Ventura, and M Licata, "Taking care of life: the new Italian law on post-mortem donation for study purposes, training and scientific research," *Annals of Anatomy - Anatomischer Anzeiger*, vol. 236, no. 2, p. 151712, Article ID 151712, 2021.

[18] S. Zaher, F. Otaki, and N. Zary, "Effect of introducing interprofessional education concepts on students of various healthcare disciplines: a pre-post study in the United Arab Emirates[J]," *BMC Medical Education*, vol. 22, no. 1, pp. 115–121, 2022.

[19] Z. Wang, G. Liang, and H. Chen, "Tool for predicting college student career decisions: an enhanced support vector machine framework," *Applied Sciences*, vol. 12, no. 9, p. 4776, 2022.

[20] X. You, "Analysis of college students' consumption and its influencing factors," *Asian Business Research*, vol. 7, no. 4, p. 29, 2022.