

Research Article

Effect of Intelligent Navigation Control-Assisted Running on Promoting the Mental Health of College Students

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Psychological wellness is a significant piece of the cutting edge idea of well-being, and a decent degree of emotional well-being is the assurance for understudies to study and live. The purpose of this paper is to study how to promote college students to form a good view of health and establish a healthy, civilized, and scientific way of life. This paper proposes the use of intelligent navigation control to assist running to promote the mental health of college students and proposes methods of intelligent navigation control to assist running. The experimental results in this paper show that $E_{\text{three-dimensional feeling}} = 10.13$, $E_{\text{action response time}} = 4.12$, and $E_{\text{sense of balance}} = 3.35$. It can be seen that the mental health indicators of college students after practice are better than those before practice.

1. Introduction

A healthy mind is also one of the most important conditions for adapting to social development. Without a healthy mind, one cannot adapt to the various pressures brought by society. The stage of university study and life is an important period for college students to exercise their psychological development and growth. A large number of studies have shown that moderate and regular physical activity is conducive to the healthy development of the mind. Physical activity not only accomplishes difficult learning tasks, but also eliminates the physical fatigue and psychological stress that comes with long hours of concentrated study. By understanding and practicing auxiliary running, while improving physical fitness, it can develop people's strength, endurance, and other qualities. Under the new situation, helping college students to establish correct mental health has become an important subject of college safety education and harmonious campus construction. College students commit suicide and self-abuse due to various psychological problems, which greatly affects social stability and harmony. In this way, it is important to concentrate on the most proficient method to

assemble an amicable mental climate for understudies, to successfully keep away from the event of different mental issues of undergrads and guarantee the mental well-being of understudies. Therefore, the research results can provide some practical and effective theoretical and method guidance for reducing the psychological problems of college students under the new situation, ensuring the psychological safety of college students, promoting the development of healthy personality of college students and building a harmonious campus and a harmonious society. The exploration on the impact of insightful route control-helped strolling on the advancement of psychological wellness, that is to say, gives another point of view and strategy for emotional well-being training. Simultaneously, it is of incredible importance for coordinating psychological well-being instruction into the change of actual training. In addition, the attitude of sports to life and the understanding of health can play a certain inspiration for contemporary health education.

The innovation of this paper lays in the following: (1) The theoretical research on the promotion of mental health by intelligent navigation control-assisted walking, its reunderstanding of psychological problems is of great

significance to the solution of a series of psychological problems and the promotion of college students' mental health. (2) This paper has certain theoretical and practical significance.

2. Related Work

At present, the research on intelligent navigation control in academia is still in the preliminary stage, and there are still many problems that need to be communicated and learned from each other among scholars, so as to better propose practical and effective measures for the construction of a good psychological environment for college students. Among them, business flight control frameworks, for example, Pixhawk, are a well-known answer for providing detection and control abilities to automated elevated vehicles (UAVs) because of the developing number of regular citizen applications utilizing four helicopters. Minimal expense worldwide route satellite framework (GNSS) beneficiaries are basic for minimal expense flight control frameworks. In any case, the situating exactness of GNSS is seriously corrupted by the famous multipath impacts in megacities. Multipath impacts cannot be wiped out; however, they can be relieved. Zhang and Hsu proposed a versatile Kalman channel to change the commotion covariance of GNSS estimations at various situating correctnesses. Versatile tuning depends on a precision order model prepared by regulated AI strategies [1]. Zhao and Lee studied the navigation problem of multimobile robots in unknown dynamic environments. The climate is totally obscure to the robot, and the general climate ought to be identified by closeness sensors mounted on the robot body. To direct the robot to move along a crash-free way and arrive at the objective position, Zhao and Lee fostered an astute route strategy in view of a blend of primary techniques. In this work, his hazard judgment strategy based on sensor data is used to avoid small convex obstacles or other robots. In addition, Zhao and Lee also devised a follow-wall strategy to solve special cases involving large convex or concave obstacles. Finally, when there is no collision risk, the robot will be guided to the corresponding target according to the target localization strategy. The simulation results show that the method has a good effect on solving the navigation problem [2]. Unmanned ground vehicles (USVs) have received increasing attention in recent decades. USVs have applications in both civilian and naval fields due to their improved mission efficiency and reduced resource cost. To productively finish the mission with next to no human mediation, a vigorous canny route, direction and control (NGC) framework is fundamental for the USV. Subsequently, Liu et al. proposed another NGC framework intended for USV named Springer. The framework coordinates a few utilitarian modules. It incorporates a dependable route module that gives solid position and heading data, a powerful autopilot module that can follow waypoints well, and an insightful way arranging module that can produce achievable and functional waypoints [3]. Considering the information immersion limitations and outer unsettling influences of electronic route, Hu et al.

proposed a fluffy vigorous control plan strategy for transport heading in view of versatile order channel back (ACFB). It takes on T-S fluffy rationale framework to surmised the nonlinear vulnerability in the control framework. The calculation joins the guidance channel and the base learning boundary (MLP) procedure to repay the control blunder, and conquers the significant issues of "intricacy blast" and "revile of dimensionality" existing in the conventional versatile reversal method. It facilitates the realization of electronic navigation applications [4]. Movement control of automated ground vehicles (UGVs) is a test for the robotization business. Almayyahi et al. meant to propose a tangible data-based fluffy derivation framework (FIS) to tackle the issue of UGV route in jumbled unique conditions [5]. The old-style counterfeit expected field (APF) strategy cannot meet this prerequisite because of the nearby minima issue. To work on the presentation of the old-style APF calculation and give more productive way wanting to portable robots, Abdalla et al. proposed another strategy in light of the mix of further developed APF calculation and fluffy rationale (ie FAPF). The calculation defeats the issues of the old-style APF calculation, particularly the neighborhood least issue, and upgrades the route capacity in complex conditions. The reproduction results show that the robot with FAPF has a smoother way, answers quicker in static and dynamic conditions, and can keep away from hindrances successfully [6]. In Juang and Zhang examination, he had inferred a few new computational and algorithmic applications for astute assistance robot frameworks in PC vision and picture handling and savvy control and route of portable robots. Juang and Zhang proposed an adaptable plan thought of an insightful assistance robot and an incorporated framework for tracking down individuals and finishing snag evasion under visual direction. He proposed a straightforward calculation in view of vision way arranging and consolidated this calculation with the centripetal measure for way arranging of labyrinth robots. The test results show that the strategy has great control impact and can be advocated and applied [7]. However, the shortcoming of these studies is that there are too few studies on intelligent navigation control, and such studies are not practical and representative.

3. Intelligent Navigation Control Method

Global positioning system (GPS) is a medium-distance circular orbit satellite navigation system, which can provide relatively accurate positioning and speed measurement for the Earth's surface. The GPS system is a global positioning system developed and maintained by the US Department of Defense, which can meet the three-dimensional position of any near-Earth space in the world and can also determine the speed and time of three-dimensional movement.

3.1. Positioning of Wireless Sensors. In many cases, the location information of the target is what the user cares about.

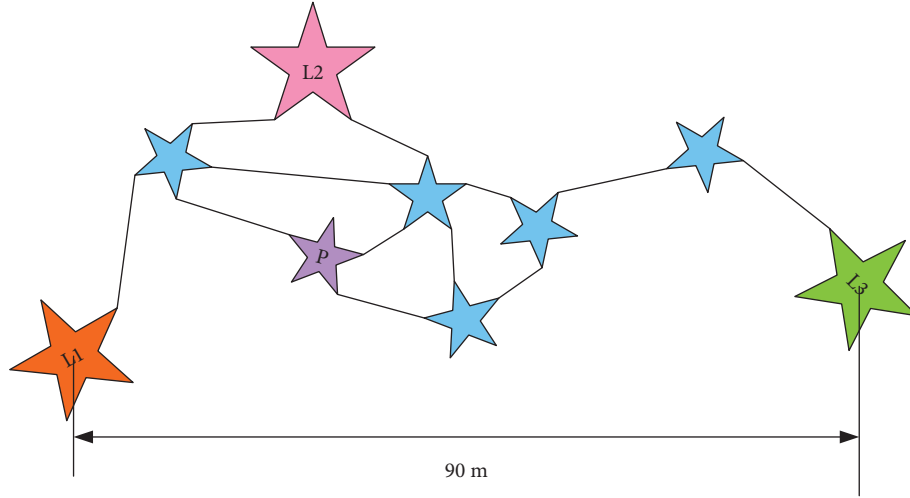


FIGURE 1: The positioning process of the DV-Hop algorithm.

For some applications, without the location of the target, the obtained information will be meaningless [8]. Wireless sensor network positioning can make up for the shortcomings of GPS that can only be positioned outdoors. Wireless sensor nodes can be placed in any place, and suitable positioning algorithms can be used to achieve high-precision positioning. Not only that, compared with GPS, the positioning of wireless sensor network has the following advantages: The hardware is straightforward, minimal expense, little size, low power utilization, helpful format, reasonable for unforgiving conditions [9]. Thus, the exploration on the remote sensor network situating calculation has extraordinary down-to-earth importance.

3.1.1. Centroid Algorithm. In computational geometry, the centroid refers to the geometric center of the polygon, and the average value of the coordinates of the vertices of the polygon is obtained as the coordinates of the centroid node. Assuming that the coordinate vector of the vertex position of the polygon is represented as $q_i = (j_i, k_i)^T$, the center of mass coordinate (\bar{j}, \bar{k}) of this polygon is as follows:

$$(\bar{j}, \bar{k}) = \left(\frac{1}{n} \sum_{i=1}^n J_i, \frac{1}{n} \sum_{i=1}^n K_i \right). \quad (1)$$

However, this method can only achieve coarse-grained positioning, which requires the deployment of high-density beacon nodes, and the location of each beacon node deployment will also affect the positioning effect.

3.1.2. DV-Hop Algorithm. The DV-Hop algorithm can solve various problems caused by low beacon point density [10]. Figure 1 shows the positioning process of the DV-Hop algorithm.

A counter is set on each unknown node, the counter is the minimum number of hops to each beacon node, and the counter is updated according to the received message. Using

the beacon point to broadcast the coordinate position, when the node receives a new broadcast message, it will judge, if the hop count is less than the stored value, the hop count will be updated and broadcast.

3.2. Ranging-Based Positioning Method. Ranging-based localization methods are performed by measuring the spatial distance or orientation between adjacent nodes [11].

3.2.1. AOA Positioning Algorithm. AOA positioning method is a positioning technology that obtains the position information of the signal transmitting node through multiple receiving nodes, using special antennas and the angle between the receiving node and the transmitting node. When using the AOA positioning algorithm, if it wants to obtain the coordinates of the target point to be measured, it is necessary to obtain the signals of three or more known position points. Given that the coordinates (m_1, n_1) of the node R_1 and the coordinates (m_2, n_2) of the node R_2 , and the angles between them and the node to be measured are ∂_1 and ∂_2 , respectively, the calculation method of the coordinate (m, n) of the node to be measured is as follows:

$$m = \frac{(n_2 - m_2 \tan \partial_2) - (n_1 - m_1 \tan \partial_1)}{\tan \partial_2 - \tan \partial_1}, \quad (2)$$

$$m = \frac{(m_2 - n_2 \cot \partial_2) - (m_1 - n_1 \cot \partial_1)}{\cot \partial_2 - \cot \partial_1}.$$

As shown in Figure 2, the receiving node can detect the arrival direction of the signal of the transmitting node through the microphone array. AOA positioning can not only determine the coordinates of nodes, but also determine the orientation information of nodes [12]. The principle of AOA positioning technology is simple, but it is not easy to implement. The array antenna used to obtain the signal direction has high cost and low precision. In addition, the AOA positioning system is susceptible to interference,

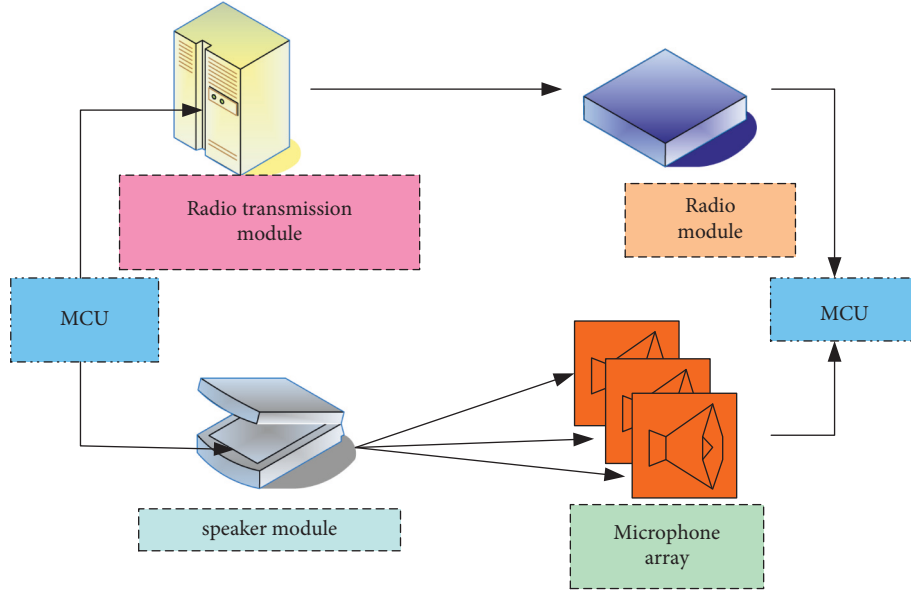


FIGURE 2: Process example of AOA ranging principle.

especially multipass interference, and cannot be applied in non-line-of-sight situations, limiting its application range. Therefore, AOA positioning is generally used as an aid to other positioning techniques.

3.2.2. TOA Positioning Algorithm. When using the TOA positioning algorithm, a mathematical model must be established, in which fixed values and environmental noise variables are used, which are realized by synchronization technology. The TOA positioning algorithm refers to a technology that calculates the distance between two devices by measuring the transmission time of a wireless signal from one device to another. Assuming that the time stamp of the signal transmitter clock is G_{gx} , the fixed value G in the TOA model is the time stamp plus the time difference between signal reception and transmission.

$$G = G_{gx} + \frac{U}{B} + \omega_{synb}. \quad (3)$$

Here, B is the propagation speed of the medium; U is the physical distance in the communication link; ω_{synb} is the synchronization error transmitted to the receiving end. When $\omega_{synb} = 0$, the two are synchronized; otherwise, the two are not synchronized [13]. The TOA positioning method puts forward high requirements on the system hardware, so it has great limitations. Therefore, the TOA positioning method that requires high-precision time synchronization is not suitable for application in indoor positioning technology. Figure 3 shows the process of the TOA ranging principle.

3.2.3. RSSI Positioning Algorithm. The received signal strength indication (RSSI) positioning method is a technology that uses the characteristics of the loss of the radio

wave signal in the propagation process and the propagation path to measure the straight-line distance between the transmitter and the target to be measured [14]. In this process, the positioning node obtains its signal strength value while receiving the reference node signal. Using the theoretical or empirical signal propagation model, the transmission distance is calculated by the signal propagation loss, and finally the location of the positioning node is obtained through the geometric relationship.

$$Q_E = \frac{Q_G}{U^n}. \quad (4)$$

The principle of RSSI ranging is as follows: the receiver estimates the distance of the target node by measuring the strength of the received wireless signal. The connection between the communicate power and the got force of the remote transmission is as in the equation, where Q_E is the received force of the remote transmission, and Q_G is the send force of the remote sign. E is the distance between the sending and receiving hubs, n is the proliferation factor, and its worth relies on the climate where the remote sign spreads.

Here, U is the distance from the transmitter to the target, and n is the loss factor of the propagation medium.

The formula can be transformed into

$$Q_E = C - 10 \times n \times \log(U). \quad (5)$$

Here, the unit of Q_E is dBm and C is a constant.

This method has been widely adopted due to its simple implementation. However, the wireless signal is easily affected by the environment, which causes the fluctuation of the RSSI value and reduces the positioning accuracy. Therefore, when using the RSSI positioning mechanism, on one hand, we should pay attention to the phenomenon of occlusion, reflection, or refraction. On the other hand, for the unavoidable situation, the method of improving the algorithm should also be used to correct the error. Figure 4

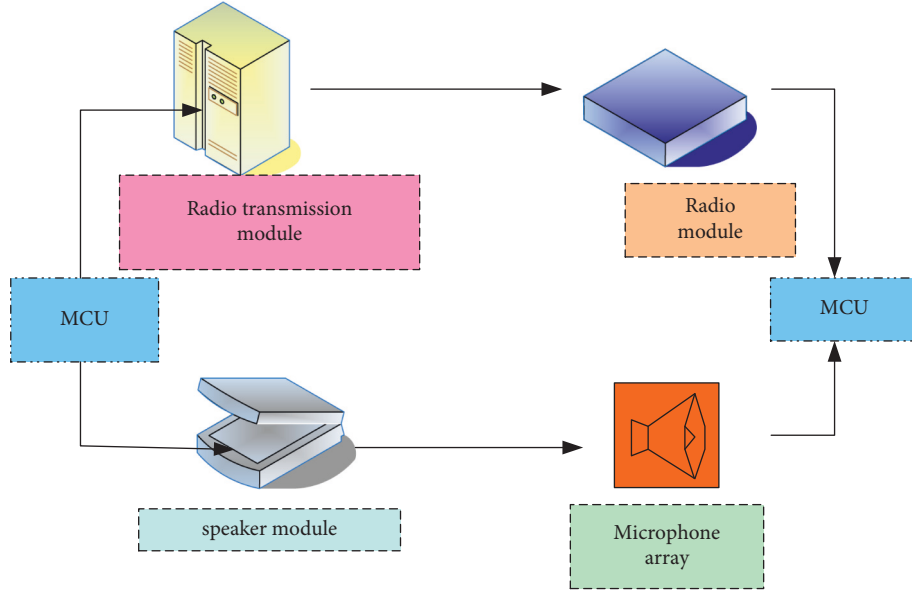


FIGURE 3: The process of the TOA ranging principle.

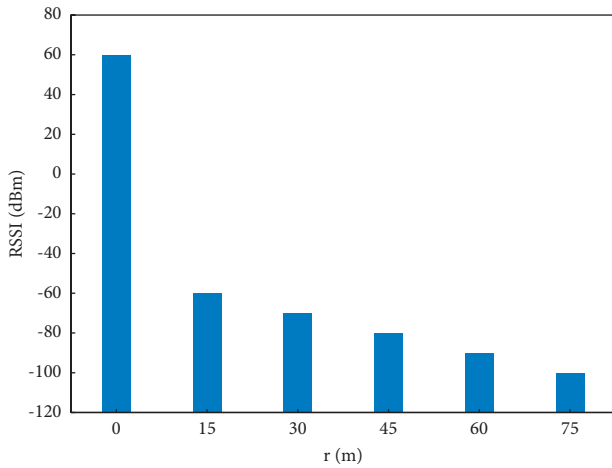


FIGURE 4: RSSI value versus distance in an ideal environment.

shows the relationship between RSSI value and distance in an ideal environment [15].

3.2.4. TDOA Positioning Algorithm. In the positioning mechanism based on time difference of arrival (TDOA), the transmitting node transmits two kinds of wireless signals at the same time, and the propagation speeds of these two kinds of signals are different. The receiving node can then calculate the distance between the two nodes according to the propagation speed of the two signals and the time difference between the arrival of the signals [16]. Compared with TOA, TDOA technology has lower requirements on the synchronization of transmitter and receiver clocks. Assuming that at time G_{GX} , the distance from the known target points to the transmitter 1 is denoted as U_1 , and the distance to the transmitter 2 is denoted as U_2 , then the expression is as follows:

$$G = G_{GX} + \frac{U_1}{B} + \omega_{synb} - \left(G_{GX} + \frac{U_2}{B} + \omega_{synb} \right) = \frac{U_1 - U_2}{B}. \quad (6)$$

Although TDOA technology has small ranging error and high precision, it has higher requirements on node hardware. Therefore, from the perspective of cost and power consumption, this technology poses a challenge to sensor networks requiring low cost and low power consumption.

3.2.5. Particle Swarm Optimization Algorithm

(1) *Introduction to Particle Swarm Optimization Algorithm.* As we all know, the inspiration of particle swarm algorithm comes from the simulated feeding process of birds. The update formulas for the basic particle swarm algorithm are shown in formulas (7) and (8). The formulation states that the position x of each particle is a potential solution in the solution space [17].

$$V_{ij}(T+1) = \omega V_{ij}(T) + G_1 U_{1j}(T) (Q_{ij} - X_{ij}(T)) + G_2 U_{2j}(T) (Q_{pj} - X_{ij}(T)), \quad (7)$$

$$X_{ij}(T+1) = X_{ij}(T) + V_{ij}(T+1), \quad (8)$$

where T is the quantity of cycles, $i = 1, 2, \dots, n_g$, and $j = 1, 2, \dots, n$. n_g addresses the quantity of particles in the populace, and N addresses the component of the arrangement space. ω is dormancy weight, G_1 and G_2 are speed increase coefficients, U_{1j} and U_{2j} are irregular numbers consistently circulated in $[0, 1]$ [18]. Equation (1) consists of three parts, the first part is the ‘‘cricket’’ part, which means that the particle maintains the previous velocity. The second part is the ‘‘cognitive’’ part, which

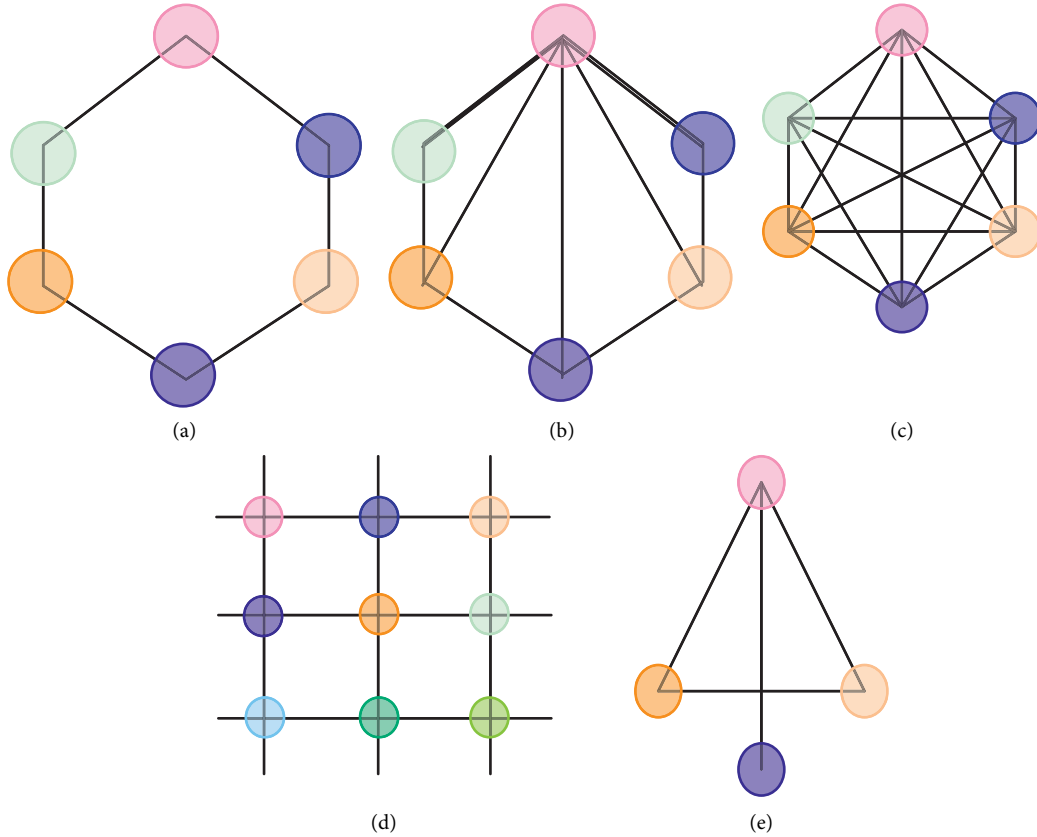


FIGURE 5: Common population topology of particle swarm optimization algorithm.

represents the thinking of the particle itself, so it is also called the cognitive coefficient. The third part is the “social” part, which represents the information sharing and mutual cooperation between particles, so it is also called the social coefficient.

(2) *Topological Structure Research of Particle Swarm Optimization Algorithm.* As shown in Figure 5, the common population topology structure of particle swarm optimization algorithm, Figure 5(d), this topology structure can make the performance of particle swarm optimization algorithm better than full topology and other topological structures [19].

3.3. Coordinate Estimation and Positioning Method

3.3.1. *Trilateration Method.* Trilateration is the most typical one of wireless sensor network positioning algorithms. As shown in Figure 6, the coordinates (m_1, n_1) , (m_2, n_2) , and (m_3, n_3) of the three beacon nodes $M1$, $M2$, and $M3$ are known. Assuming that the coordinate of the unknown node W is (m, n) , according to the RSSI value received by the unknown node, the distances from Q to $M1$, $M2$, and $M3$ are obtained as d_1 , d_2 , and d_3 , respectively.

Then according to the principle of trilateration, the following formula is established:

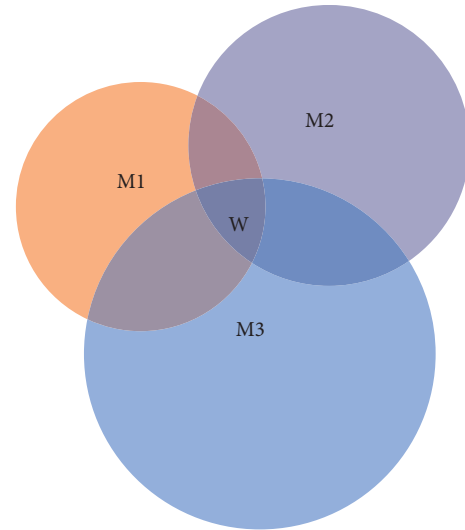


FIGURE 6: The positioning principle of trilateration.

$$\begin{aligned}
 (m_1 - m)^2 + (n_1 - n)^2 &= d_1^2, \\
 (m_2 - m)^2 + (n_2 - n)^2 &= d_2^2, \\
 (m_3 - m)^2 + (n_3 - n)^2 &= d_3^2.
 \end{aligned} \tag{9}$$

The coordinates of point A can be obtained from the following formula:

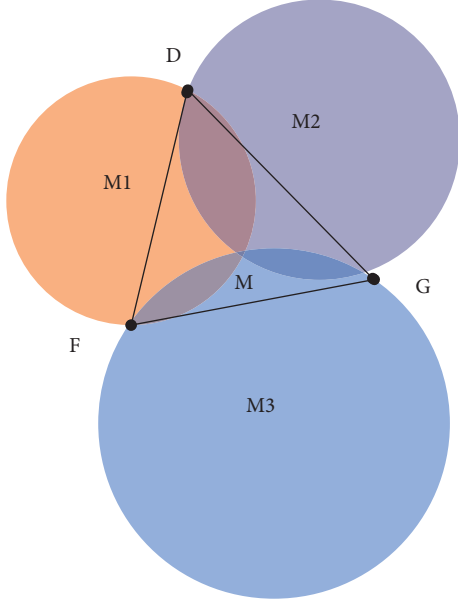


FIGURE 7: Schematic of triangulation.

$$\begin{bmatrix} m \\ n \end{bmatrix} = \begin{bmatrix} 2(m_1 - m_3) & 2(n_1 - n_3) \\ 2(m_2 - m_3) & 2(n_2 - n_3) \end{bmatrix}^{-1} \begin{bmatrix} n_1^2 - n_3^2 + m_1^2 - m_3^2 + d_3^2 - d_1^2 \\ n_2^2 - n_3^2 + m_2^2 - m_3^2 + d_3^2 - d_2^2 \end{bmatrix}. \quad (10)$$

This is the ideal solution formula. In the actual environment, the distance measured by a certain method of nodes often has errors, so that the three circles cannot meet at one point, and measures need to be taken to deal with it in specific applications [20].

3.3.2. Triangulation Method. The principle of the triangulation method is shown in Figure 7, and the coordinates of the three nodes D , F , and G are known as (m_a, n_a) , (m_b, n_b) , and (m_c, n_c) , respectively. The angles of the target node relative to the three known nodes D , F , and G are $\angle DHF$, $\angle DHG$, and $\angle FHG$, respectively. Through the three points D , H , and F , the circle whose center is $H_{ab}(m_{h_{ab}}, n_{h_{ab}})$ and whose radius is $d_{ab} = DH_{ab} = FH_{ab}$ can be determined; then,

$$\begin{aligned} \sqrt{(m_{h_{ab}} - m_a)^2 + (n_{h_{ab}} - n_a)^2} &= d_{ab}, \\ \sqrt{(m_{h_{ab}} - m_b)^2 + (n_{h_{ab}} - n_b)^2} &= d_{ab}, \\ (m_b - m_a)^2 + (n_b - n_a)^2 &= 2d_{ab}^2(1 - \cos \partial_1). \end{aligned} \quad (11)$$

According to the formula, the coordinates of the center h_1 and the value of the radius d_1 can be obtained. Similarly, the coordinates of the center h_2 and the radius d_2 can be determined by points D , H , and G , and the coordinates h_3 and radius d_3 of the center of the circle determined by points F , H , and G can be obtained. After the three circles are determined, the triangulation method is converted to

the trilateration method to calculate the coordinates of the target point. Figure 7 is a schematic diagram of triangulation.

3.3.3. Maximum Likelihood Estimation Method. It is known that the coordinates of the nodes $B_1, B_2, B_3, \dots, B_i$ and the like are $(m_1, n_1), (m_2, n_2), (m_3, n_3), \dots, (m_i, n_i)$, respectively, and the distances from the i nodes to the target coordinate $h(m, n)$ are $d_1, d_2, d_3, \dots, d_i$, respectively, then there are

$$\begin{aligned} (m - m_1)^2 + (n - n_1)^2 &= d_1^2, \\ (m - m_2)^2 + (n - n_2)^2 &= d_2^2, \\ (m - m_i)^2 + (n - n_i)^2 &= d_i^2. \end{aligned} \quad (12)$$

Solving the formula can get

$$M = (B^T B)^{-1} B^T a. \quad (13)$$

4. Experiments and Analysis on Promoting the Mental Health of College Students

4.1. Influencing Factors of College Students' Psychological Environment. First of all, the formation of college students' psychological environment is inseparable from the active subject. It is based on the subject's psychological perception and is influenced by factors such as the subject's existing cognitive experience, and the final psychological environment is subject-centered. The influencing factors from the subject of college students can be divided into internal factors and mediating factors [21, 22].

In short, under the combined action of these influencing factors (as shown in Figure 8), the complete form of the psychological environment of college students can be presented. And once formed, it will be stable and continue to affect the daily behavior and psychological performance of college students [23]. At the same time, because the psychological environment and the external objective environment are interactive, the evolution of one party will cause the evolution of the other party sooner or later. Therefore, the psychological environment of college students is also variable, which is the basis for us to explore how to optimize the psychological environment of college students by improving the external environment. Psychological activity classification is as shown in Table 1.

4.2. Comparison of College Students' Self-Assessment Factors before and after the Experiment. Through the self-assessment test of 30 experimental subjects, the X^2 test was carried out on the pre-experiment and postexperiment evaluation factors of the experimental subjects.

From the data in Table 2, it can be seen that through 20 weeks of running, the mental health level of college students before and after the experiment has changed significantly, and each factor index after the experiment is better than the index before the experiment.

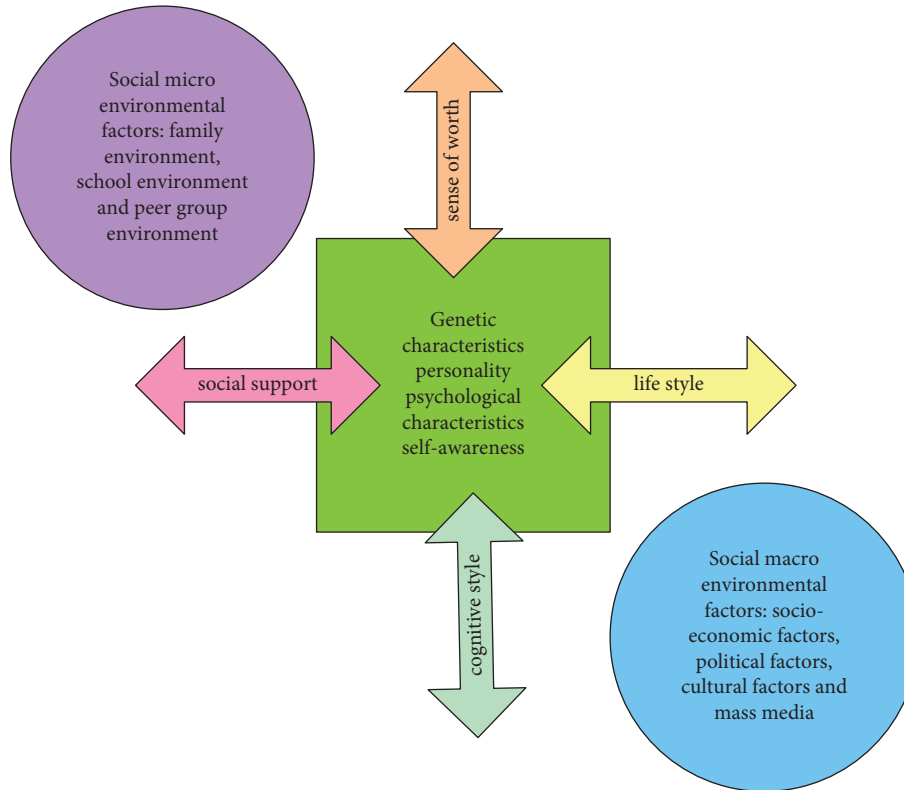


FIGURE 8: Influencing factors of college students' psychological environment.

TABLE 1: Classification of mental activities.

	Individual psychology	Psychological process	Knowledge, emotion, intention and action
Psychological activities	Individual psychology	Individual psychology	Individual tendency: need, motivation, etc.
		Self-consciousness	Individual characteristics: temperament, character and ability
		Interpersonal relationship	

TABLE 2: SCL-90 amounts of college students before and after running.

Factor	Before experiment		After the experiment		X ²	P
	Average value	Standard deviation	Average value	Standard deviation		
Psychotic	1.55	0.48	1.51	0.45	0.89	>0.04
Terror	1.36	0.42	1.34	0.35	0.71	>0.04
Hostile	1.65	0.52	1.47	0.46	3.84	<0.02
Anxious	1.68	0.51	1.52	0.15	2.03	<0.04
Depressed	1.78	0.54	1.62	0.26	3.11	<0.02
Paranoid	1.82	0.52	1.66	0.38	2.76	<0.04
Interpersonal sensitivity	1.94	0.55	1.68	0.52	4.22	<0.02
Obsessive compulsive symptoms	1.28	0.34	1.22	0.24	2.13	<0.04
Somatization	1.35	0.37	1.32	0.34	1.61	<0.04

4.3. College Students' Self-Assessment Factors before and after the Experiment. Living in college is like surviving in a small society. Many college students are mostly princesses and little princes at home before entering the school. Parents take care of everything, and they have to take care of everything by themselves. They face pressure from study pressure, life pressure, social, and other aspects. In addition, the content and form of teaching in universities are mostly different from high school courses. There are many courses, and teachers do not care about students, but rely on students'

self-consciousness. It makes these top students feel neglected, and some students are not good at expressing themselves in classmates, for fear of being looked down upon by classmates. The feeling of being ignored and despised over time creates a feeling of inferiority. And through running such an exercise method can appropriately relieve the discomfort in the students' hearts and release the depressed emotions in their hearts. Through the experiment of 30 students before and after practice (Figure 9), it is found that a moderate amount of running can effectively improve

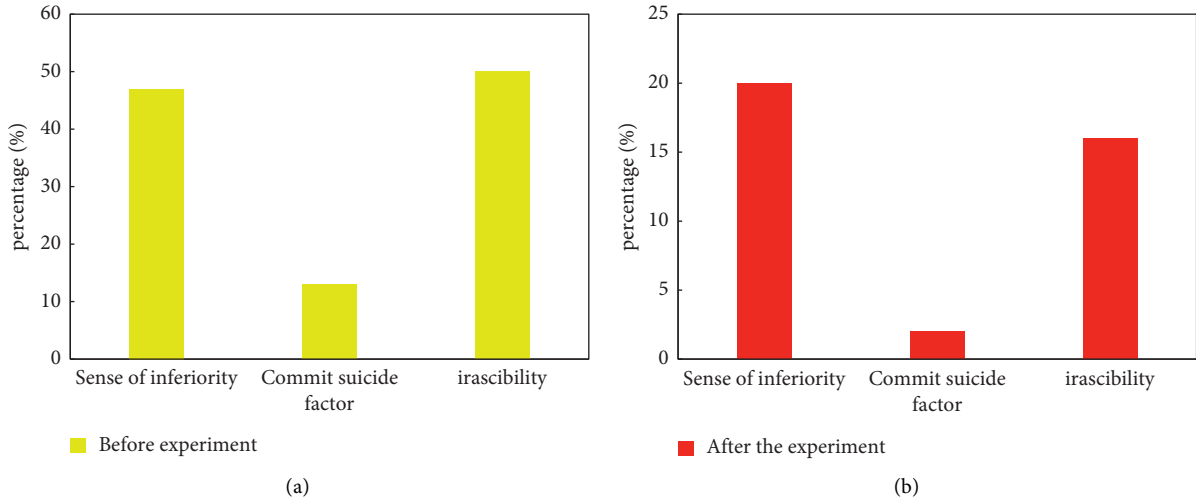


FIGURE 9: Comparison plot of very significant factors.

TABLE 3: *t*-test table of mental health indicators of college students.

Psychological indicators	After the experiment		Before experiment		<i>E</i>
	Average value	Standard deviation	Average value	Standard deviation	
Action reaction time	44.13	1.16	61.05	2.99	4.12
Proprioception	1.78	0.56	5.48	0.58	10.13
Sense of balance	39.37	1.01	17.09	2.85	3.35

students' courage, optimistic attitude, and strong will to face difficulties. By approaching life with an open mind, it can also avoid excesses caused by anger and impulsiveness. It can be seen from Figure 9 that there are three factors of sensitivity, depression, and hostility in interpersonal relationships. After the experiment, it is obviously better than before the experiment, especially the psychological phenomena such as inferiority complex, suicide, and irritable temper are obviously better than before the experiment [24].

4.4. Comparison of Mental Health Indicators of College Students before and after the Experiment. From the data in Table 3, it can be seen that the mental health indicators of college students after practice are better than those before practice. Among them, $E_{\text{three-dimensional feeling}} = 10.13$, $P = 0.01$, $P \leq 0.01$; $E_{\text{action response time}} = 4.12$, $P = 0.014$, $P < 0.05$; $E_{\text{sense of balance}} = 3.35$, $P = 0.009$, $P < 0.05$. That is to say, the results measured by motor response time and balance ability have significance, while the results measured by proprioceptive ability have very significant significance.

5. Discussion

In recent years, under the background of economic globalization and information networking, the pace of our life has been accelerating, social competition has become increasingly intensified, cultural development has gradually shown a trend of diversification, and the conflicts of various values are also deepening [25]. Moreover, with the advent of

the era of popularization of higher education and the continuous deepening of the reform of colleges and universities, the number of college students has increased significantly, and the surrounding environment of the campus has become increasingly complex [26]. Good physical activity can make people have a positive and healthy psychology, be calm and calm, have the courage to face reality, strive to change unfavorable situations, challenge themselves and be less or not affected by bad external environments. On the contrary, a bad psychological environment may lead to negative and pessimistic people, emotional instability, and inability to cope with the reality. It is vulnerable to the influence of bad external factors, it is difficult to control their own life, and even produces a sense of inferiority, despair, insecurity, and then a series of psychological safety problems.

The university stage is a critical period for young people's life and development. As a unique group with relatively high cultural level, college students are passionate and more responsive. However, due to rapidly changing social pressures, increasingly fierce competition, and many problems from study, professional, employment, economic, and emotional aspects, they tend to lose their way and are prone to various uncertain psychological reactions. Focusing on further developing the psychological well-being level of undergrads can help China's schools and colleges' emotional well-being instruction.

On the premise of discussing the theory of college students' psychological environment and analyzing the relevant environmental factors at various levels, college students' own psychological characteristics and other factors, this paper proposes measures to optimize college

students' psychological environment and ensure psychological safety from different levels and angles. It includes optimizing the external related environmental factors of college students and optimizing the psychological factors related to the main body of college students. In a word, this study starts from the motivation of studying the psychological problems of college students and ensuring their psychological safety, and emphatically discusses the theory about the psychological environment of college students. On this basis, this paper attempts to propose measures to optimize the psychological environment of college students and ensure psychological safety from the perspective of epistemology [27].

6. Conclusion

To actually keep away from the mental issues of undergrads, guarantee their mental wellbeing, and guarantee the sound improvement of understudies' emotional well-being, it is important to concentrate on the impact of keen route helped running on advancing understudies' psychological well-being. This paper is based on the analysis of the influencing factors and characteristics of the psychological environment of college students, as well as the analysis of some realistic environmental factors that affect the psychological health of college students and endanger psychological safety. And on the basis of the close connection with today's social phenomena and related new viewpoints and new theories, this paper proposes measures to optimize the psychological environment from two aspects: optimizing the external environment of college students and optimizing the unhealthy psychological factors of college students. Only in this way can the internal and external work together to form a joint force to achieve the best results, and ultimately ensure the mental health of college students, ensure psychological safety, and build an overall harmonious environment. The experimental results show that a moderate amount of running can effectively relieve the pressure of study and life, regulate the development of students' physical and mental health, and cultivate students' tenacity, perseverance, and hard-working spirit. Therefore, it is suggested that it should be widely popularized and promoted in various colleges and universities.

Data Availability

No data were used to support this study.

Conflicts of Interest

The authors declare that there are no conflicts of interest.

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