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Research Article

Evaluation Method of Basketball Special Technology in College Sports Specialty Based on Genetic Algorithm

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Assessment is an important link and method in the teaching process, it can be used in teaching activities, obtaining feedback information for improving teaching methods, and guiding students to better master the knowledge and skills they have learned. This research mainly discusses the assessment and evaluation method of basketball special technology for college sports major based on genetic algorithms. In this paper, a genetic algorithm is proposed, aiming at the shortcomings of the genetic algorithm that can easily generate local optimal solutions, the genetic algorithm is improved, and the superiority of the algorithm is verified by comparative experiments. Finally, the algorithm is applied to the basketball professional skills assessment data and evaluation data to verify the practicability of the algorithm and my valuable information in a large amount of data in the assessment process. Based on the existing assessment basis, expert interviews, and questionnaire survey results in the assessment and evaluation methods of sports professional basketball special techniques, the necessity and basic principles of the innovation of the assessment and evaluation methods of special techniques are expounded. Then, by building a new system of assessment methods for basketball specialization in sports training majors, we can better explore the teaching objectives, teaching time, teaching content, teaching methods, organizational forms, teaching assessment and other aspects of basketball for sports majors in colleges and universities. Due to the complex nonlinear relationship between the technical evaluation results of basketball experts and professors and their influencing factors, as well as the unique advantages of genetic algorithms, it is feasible to introduce genetic algorithms into the field of basketball technical evaluation. There was no significant difference in the evaluation scores between the basketball special technology assessment model based on a genetic algorithm and the basketball skill assessment experts ($P > 0.05$). The scientific and effective technical test indicators for young basketball players can also objectively test the quality and effect of teaching and training for different age groups. It is a favorable tool for talent selection and plays a guiding role in grassroots youth basketball training. The content and methods stipulated by the test indicators directly affect the training content and methods of grassroots youth basketball players. This research helps to improve students' basketball skills and tactics and comprehensive practice ability.

1. Introduction

Basketball is the second largest sport in the world. It is deeply loved by the masses. This sport is also included in every college curriculum, and the basketball court has become an important symbol of college sports culture. The General Administration of Sports of the People's Republic of China attaches great importance to the cultivation of reserve talents for youth and children' s basketball, especially for the scientific selection, scientific training, and scientific management of young basketball players. The NBA is the most competitive and high-level league in the world. Its influence is not only limited to the arena but also radiates to the commercial and entertainment fields. This makes more people pay attention to the sport of basketball, which also affects many young people to play the sport of basketball. Whether in colleges or primary and secondary schools, basketball has become the most common and most enthusiastic sport among students. Therefore, colleges and universities of physical education attach great importance to the development of basketball special courses. By imparting techniques and theories to students who study basketball

special courses in sports majors, they have the ability to serve society with what they have learned. The National Basketball Association (NBA) is a men's professional basketball league composed of 30 professional teams in North America. It is one of the four major professional sports leagues in the United States.

The development trend of modern basketball techniques and tactics is concentrated in the two aspects of "individualization of overall basketball and integration of individual basketball". In basketball games, the team's overall cooperation between offense and defense is displayed, and it is closely integrated with individual skills. At present, the development direction of campus basketball is to popularize and improve. In the process of popularization, the basketball game level of students is improved, so as to realize the diversified development of students. The vigorous development of campus basketball is conducive to increasing the basketball population, expanding the popularization area of basketball, consolidating the basketball population base, and improving the level of basketball competition. The campus is a big stage for youth training and education, and the teachers and basketball courts that schools have are the basis for the development of campus basketball. The activity of basketball entering the campus is conducive to rapidly increasing the basketball population, promoting the popularization of basketball, then driving the improvement of basketball level. Based on the above-mentioned importance of young basketball players' skills, the article considers the three points of cultivating basketball reserve talents and the characteristics of young people's own development. It has important theoretical and practical significance to analyze and study the technical test index system and evaluation standard of young basketball players.

The purpose of this paper is to formulate a scientific assessment and evaluation method system, cultivate professional application-oriented basketball talents, and provide a basis for the further reform and development of the assessment and evaluation methods of professional basketball specialization in sports training in other sports colleges. Through the use of scientific and reasonable technical assessment methods, we can obtain student's real academic performance feedback, so as to explore better teaching or training methods and achieve teaching goals. Based on the research methods of competition and training at home and abroad, and the actual investigation of basketball training and consulting experts, aiming at the problems existing in the training practice of young basketball players, this paper has targeted technical test indicators and evaluation standards for young basketball players. This issue is further explored and studied.

2. Related Work

The technical test index system for youth basketball players should be designed closely around the goal of evaluating and monitoring the technical level of players. It is composed of indicators representing various techniques and reflects the true level of athletes in an all-round and multi-perspective way. There are three types of evaluation: diagnostic evaluation, procedural evaluation, and summative evaluation in the current assessment and evaluation carried out by physical education colleges, and each method has its own function. Tavakkoli–Moghaddam *R* proposed a Genetic Algorithm (GA) for the redundancy assignment problem of series-parallel systems [1]. Qiang and Wu studied a global optimization method combining genetic algorithms [2]. Gong et al. proposed an ensemble-based genetic algorithm to solve these problems efficiently [3]. The purpose of Panapakidis and Dagoumas is to test the robustness of a novel hybrid computational intelligence model in current gas demand forecasting [4]. Nemati et al. introduce two scheduling as general tools [5]. Therefore, schools and teachers should allow students to accept the second assessment when students make accidental mistakes, which can really test the actual level of students and can avoid disabling the efforts made by accidental mistakes by not being recognized and reducing the enthusiasm of students for basketball-specific autonomous learning. The establishment of technical test indicators for basketball players should conform to the basic principles of establishing an indicator system and the requirements of modern methodology. In modern methodology, human invention methods must have elements and structures. The method is the human idea system, which is composed of the target layer, the criterion layer, and the index layer, which is the basic form of training that consists of the elements of the index layer.

3. Evaluation Method of Basketball Special Technology for Sports Majors in Colleges and Universities

3.1. Genetic Algorithm. A genetic algorithm is a stochastic global search optimization method that imitates biological evolution mechanisms. Its essence is a global, parallel, and efficient search method through which the global optimal solution can be obtained. Nowadays, the genetic algorithm not only gives a clear algorithm description, but also establishes many efficient and practical models, and has been widely used in many fields.

With the continuous development of ecology, considering the defects of the biological evolution mechanism GA, another important theory has also been excavated, namely, biodiversity and coevolution. The coevolution theory and the Darwinian evolution theory have obvious differences. It believes that there is a correlation between the evolution of some species and the evolution of other species; that is, according to the characteristics of mutual correlation and mutual benefit between species, its realization is also multifaceted. For example, mutual benefit between different species and different individuals can also be expressed as mutual constraints between different species and different individuals [6]. The feature selection flowchart is shown in Figure 1.

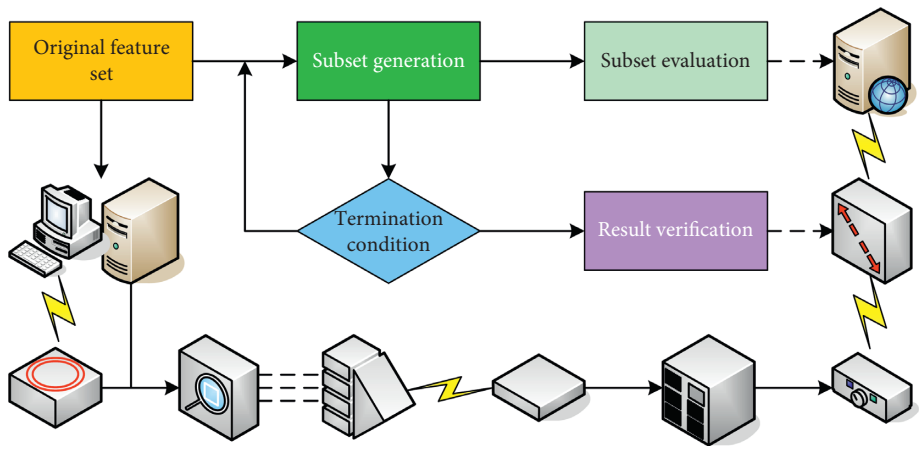

Figure 1: Feature selection flowchart.

Letting J_ω be the total mean squared distance within a class, J_b be the total mean squared distance between classes, S_ω be the total scattering matrix within a class [7]. Reflecting requirements for small and large distances at the same time, a criterion function is formed

$$\begin{aligned} J_1 &= \frac{J_b}{J_\omega} = \frac{tr(S_b)}{tr(S_\omega)}, \\ J_2 &= tr\left(S_\omega^{-1} S_b\right), \\ J_3 &= \ln\left(S_\omega^{-1} S_b\right), \\ J_4 &= tr\left(S_\omega^{-1} S_t\right), \\ J_5 &= \ln\left(S_\omega^{-1} S_t\right). \end{aligned} \tag{1}$$

The criterion function $J(\cdot)$ should be a function of the class probability density and the prior probability of various types. For the two cases, the criterion function $J(\cdot)$ can be expressed as [8]

$$J(\cdot) = \int f\left(p(x|\omega_1), p(x|\omega_2), p(\omega_1), p(\omega_2)\right) dx. \tag{2}$$

Entropy is used as a measure of uncertainty in information theory, which is a function of $P(\omega_1|x), P(\omega_2|x), \ldots, P(\omega_c|x)$, namely,

$$H = J_C\left[p(\omega_1|x), \ldots, p(\omega_c|x)\right]. \tag{3}$$

According to L' Hospital' s law, Shannon entropy can be obtained from generalized entropy

$$H(X) = -\sum_{i=1}^{c} p(\omega_i|x) \log_2 \, p(\omega_i|x). \tag{4}$$

The crossover probability is as follows:

$$P_{c,i} = \begin{cases} \left(\dfrac{f_{\max} - f'}{f_{\max} - f_{ave}}\right)^{(1/GH(i,i'))}, & f' \geq f_{\text{ave}}, \\ 1, & f' < f_{\text{ave}}. \end{cases} \tag{5}$$

The better the feature that meets these two requirements, the better the subset is [9]. Its fitness function is as follows:

$$f_1 = \sum_{i=1}^{N} \left(\frac{S_b}{S_w}\right)_i - corr2, \tag{6}$$

The mathematical expressions of between-class variance and within-class variance are

$$\begin{aligned} S_b &= (m_1 - m_2)^2, \\ S_w &= (\sigma_{M\_1})^2 + (\sigma_{M\_2})^2. \end{aligned} \tag{7}$$

Among them, m_1 is the mean of the samples of category 1 under a certain feature, m_2 is the mean of the samples of the category under a certain feature, and corr2 is the correlation between features [10].

The mathematical expression of the trace-based between-class variance is

$$tr[S_b] = \sum_{i=1}^{c} n_i \|m_i - m\|^2. \tag{8}$$

Among them, m_i is a certain feature [11].

After adding the minimum number of connected edges, the degree distribution can be calculated as

$$p(x) = \frac{m-1}{x_{\min}} \left(\frac{x}{x_{\min}}\right)^{-m}. \tag{9}$$

The sample data n in the likelihood function can be expressed as

$$p(x, m) = \prod_{i=1}^{n} \frac{m-1}{x_{\min}} \left(\frac{x}{x_{\min}}\right)^{-m}. \tag{10}$$

The log-likelihood expressed form [12]

$$L = \ln \prod_{i=1}^{n} p(x_i) = n \ln(m-1) - \ln x_{\min} - m \sum_{i=1}^{n} \ln \frac{x}{x_{\min}}. \tag{11}$$

Setting to $\partial L / \partial m = 0$, you can find

$$\widehat{m} = 1 + n\left[\sum_{i=1}^{n} \ln \frac{x}{x_{mi}n}\right]^{-1} = 1 + n\left[\sum_{i=1}^{n} \ln x\right]^{-1}. \quad (12)$$

3.2. Basketball Special Technical Assessment and Evaluation. According to the characteristics of basketball special teaching and training objectives, the focus of assessment and evaluation should be on the mastery of techniques and the ability to use techniques and tactics flexibly. Universities still use the traditional assessment method for the assessment and evaluation of basketball special skills in sports training majors, which lacks the assessment of students' practical ability. In this kind of assessment, there is no opportunity for students to practice the basketball skills they learn in and out of class, and students have gradually lost their interest in learning. Therefore, formulating a scientific and comprehensive technical assessment and evaluation method system, selecting a reasonable technical assessment and evaluation method, testing the teaching effect, and mobilizing the enthusiasm of the students are of great importance to achieve the teaching objectives and special training objectives of basketball special courses and improve the quality of teaching. The basketball special technology course formulates the corresponding syllabus according to the training objectives of the sports training major. In the teaching process, according to the basketball special technology course objectives, teachers use different teaching methods to enable students to learn and have the ability of basketball skills and tactics. Then, the student's mastery and application of skills and tactics are tested through practical assessment, so as to better realize the training goals of the basketball special technical courses [13, 14]. Through the use of basketball to cultivate students' positive and healthy attitude, it can help students to establish a sense of physical exercise, so that students can learn to use basketball to adjust their psychological state and vent their bad emotions. At the same time, students can also experience the fun and sense of achievement of basketball in sports, help them cultivate optimistic, positive, cheerful, generous and confident psychological quality, and improve student's mental health ability.

3.3. Expert Interview Method. Through interviews, we will gain an in-depth understanding of the current situation of professional basketball technical assessment in sports training, the necessity of innovation in assessment and evaluation methods, and the feasibility of adding competition assessment and specific indicators of competition assessment and evaluation and discuss the specific implementation of technical assessment and evaluation methods after innovation and the improvement opinions given after 2 semesters of implementation. In this paper, experts have given the greatest help to the implementation status of the current basketball technology assessment and evaluation, the selection of technical assessment, and evaluation indicators after innovation and the specific implementation operations. The innovation of assessment methods is shown in Figure 2 [15].

3.4. Expert Evaluation Judgment Matrix. The assessment and evaluation system of basketball specialization is analyzed and constructed by the evaluation and application of basketball specialized technology for sports majors in sports colleges. Divided into four aspects: theoretical performance, technical evaluation, skill compliance, and normal performance. The bottom layer means the plan or strategy adopted to solve the problem, including the 21 sub indicators of the four criterion layers [16, 17]. When dealing with multi-objective factor optimization problems, complex problems are resolved into several levels of problems. By comparing and judging based on experience and by calculating the proportion of each level index to the total target weight, the larger the weight ratio is, the better the scheme is, and the relevant strategies are implemented for the scheme according to the modeling results.

(1) Normalize each column of the judgment matrix:

$$\overline{b}_{i,j} = \frac{b_{ij}}{\sum_{k=1}^{n} k_j}, \quad i, j = 1, 2, \ldots, n. \quad (13)$$

(2) $\overline{W}_i$ needs to be calculated after matrix normalization, and its calculation formula is

$$\overline{W}_i = \sum_{j=1}^{n} \overline{b}_{i,j}, j = 1, 2, \ldots, n. \quad (14)$$

(3) Normalizing the vector $\overline{W} = [\overline{W}_1, \overline{W}_2, \ldots, \overline{W}_n]^T$, and its formula is

$$W_i = \frac{\overline{W}_i}{\sum_{j=1}^{n} \overline{W}_j}, \quad i = 1, 2, \ldots, n. \quad (15)$$

According to the calculation, we can get the weight of each dimension index, of which the weight of theoretical performance is 0.20. For the convenience of calculation, we can round up the weight of each dimension to obtain the percentage of each dimension of the basketball special technical assessment system as 20%, 40%, 30%, and 10%, respectively [18].

3.5. Assessment Methods for Basketball Special Skills. The assessment methods are as follows: In the first school year, round-trip running, shooting, and comprehensive dribbling and shooting. In the second school year, defensive footwork, 1-minute strength shooting, and comprehensive dribbling shooting. In the third school year, three people pass, catch, and layup, the basketball skills and tactics application ability test (accounting for 40% of the overall assessment score), and the basketball rules and referee method application ability test (accounting for 40% of the total assessment score) [19].

3.6. Statistical Processing. Computer statistics, SPSS19.0 software, and EXCEL tables are used to carry out statistics on the obtained data and carry out statistical analysis and

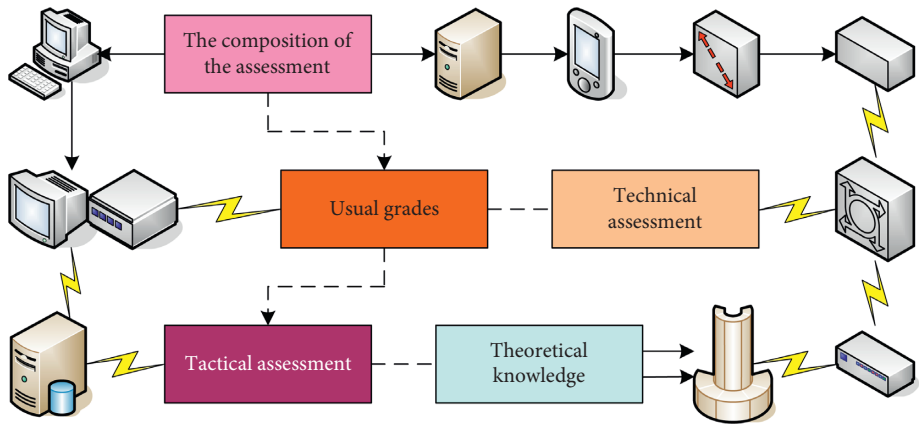

Figure 2: Innovation in assessment methods.

processing of relevant data. The descriptive statistical parameters (mean, standard deviation, kurtosis, skewness, maximum, minimum, cumulative frequency, and percentage) of various technical indicators are calculated and tested. The normal distribution test was carried out on the test indicators of different grades, and the evaluation criteria were formulated according to the data type of the test results using the standard percentage method and the cumulative frequency distribution table [20].

4. Evaluation Results of the Basketball Special Technical Assessment for College Sports Majors

In the results of the questionnaire validity test, there are 2 people who think that the construct validity is very reasonable, are 6 people who think it is reasonable, and is 1 person who thinks it is general (very reasonable and reasonable statistics are shown in Figure 3(a)). The content validity is considered to be very reasonable with 1 person, reasonable with 7 people, and average with 1 people. There is 1 person who thinks the overall structure is very reasonable, are 5 people who think it is reasonable, and are 3 people who think it is general (general, unreasonable, and unreasonable statistics are shown in Figure 3(b)).

It can be seen from Table 1 that the basketball special course has a total of 576 credit hours, and the technical part is 512 credit hours, accounting for 88.89% of the total credit hours. Among them, there are 222 credit hours in the teaching and training of basketball skills, accounting for 43.36% of the total credit hours of technical courses. The teaching and training part of basketball tactics has 148 hours, accounting for 28.90% of the total hours of technical courses. Basketball special physical fitness teaching and training totals 64 hours, accounting for 125% of the total hours of technical courses. There are 64 hours of basketball rules and refereeing, accounting for 12.5% of the total hours of technical courses. There are 14 hours of motorized classes, accounting for 2.7% of the total number of hours of technical classes. The schedule of basketball special courses is shown in Table 1.

Experts believe that the proportion of assessment and evaluation methods in teaching from high to low is as follows: testing students' basketball skills learning effects accounted for 46.67%, promoting students' active learning of basketball skills accounted for 20%, and improving students' basketball skills and tactics level accounted for 20%, teachers' teaching effects feedback accounted for 13.33% (the statistics of improving students' basketball skills and tactics level and testing students' basketball skills learning effects are shown in Figure 4(a)). This shows that scientific and reasonable assessment and evaluation methods have a certain role in testing students' basketball skills and learning effects, improving students' basketball skills and tactics, promoting students' active learning of basketball skills, and providing feedback on teachers' teaching effects in the teaching process (promoting students' active learning of basketball skills and teachers' feedback on teaching effects are shown in Figure 4(b)).

As for the main body of evaluation, 30.21% think that the main research is on students' willingness and learning content, while 10.56% think that students need to communicate more with teachers. The main body of the evaluation survey is shown in Table 2.

13.33% of experts were very satisfied with the current assessment and evaluation methods, and 26.67% were satisfied. Overall, school assessment methods can basically meet the needs of teaching evaluation, but 46.67% hold a general attitude, and 13.33% are not satisfied (the statistics of very satisfied and satisfied are shown in Figure 5(a)). It can be seen from the expert interviews that the current assessment and evaluation of basketball skills is only a skill assessment. Combined with the competitive characteristics of basketball skills, the current technical assessment methods cannot fully reflect the students' mastery of basketball skills and the effect of teaching (generally, the statistics of dissatisfaction and dissatisfaction are shown in Figure 5(b)).

93.33% of the experts believe that the current evaluation standards for basketball special technical assessment are

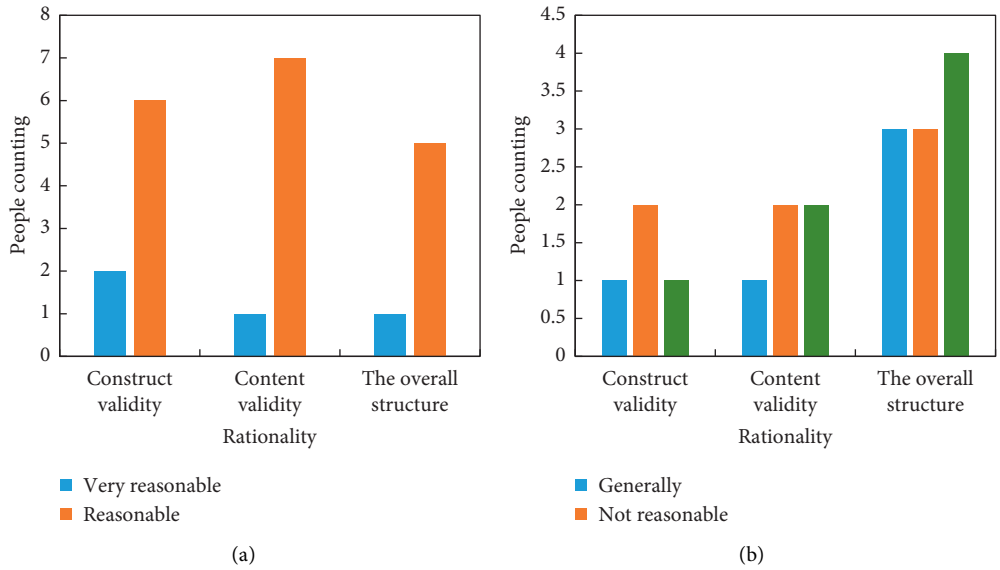

Figure 3: Results of the questionnaire validity test. (a) Very reasonable and reasonable statistics. (b) General, unreasonable and not much reasonable statistics.

Table 1: Schedule of special basketball courses.

Teaching content	Class hours	Theory	Practice
Basketball overview	4	12	0
Basketball technical teaching and training	234	12	222
Basketball tactics teaching and training	160	4	18
Basketball special physical training and training	72	4	64
Basketball competition organization and management	4	4	0
Basketball rules and refereeing	72	4	64
Basketball teaching theory and methods	4	4	0
Basketball training theory and methods	4	64	0
Basketball scientific research work	4	10	0

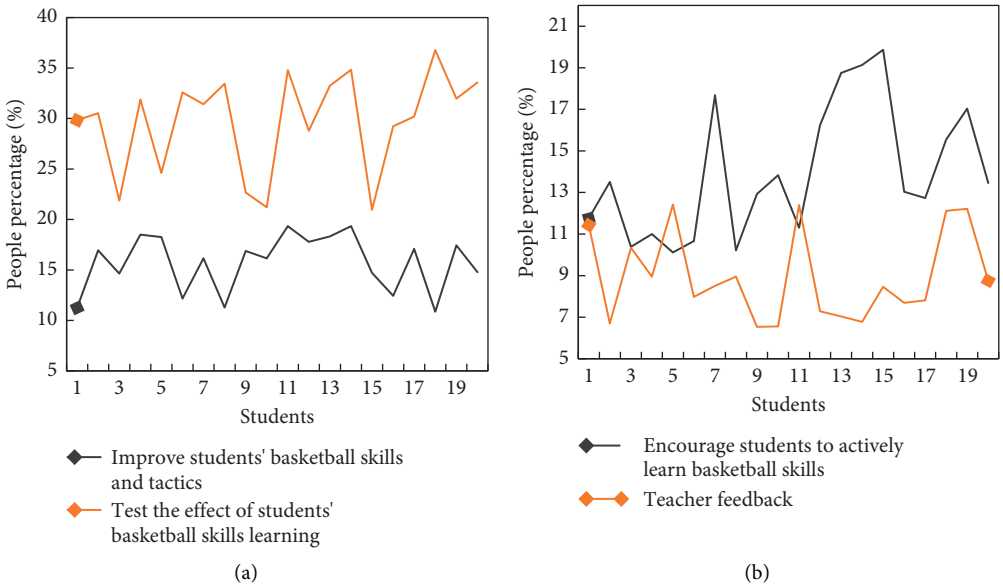

Figure 4: Positive effects. (a) Improving students' basketball skills and tactics and testing the statistics of students' basketball skills learning effect. (b) Promoting students' active learning of basketball skills and feedback on teachers' teaching effects.

Table 2: Survey of evaluation subjects.

Serial number	Projects	Proportion (%)
1	Student willingness and learning content	30.21
2	Need to communicate with teachers	10.56
3	Both teachers and students should investigate	59.23

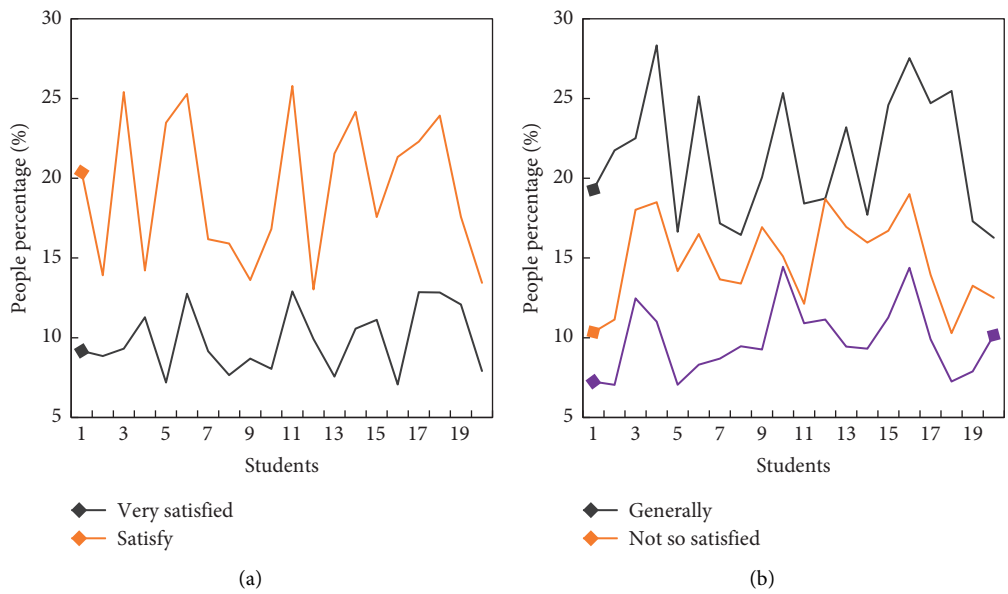

Figure 5: Assessment method evaluation. (a) Very satisfactory and satisfactory statistics. (b) General, less satisfied and dissatisfied statistics.

reasonable, only 6.67% think it is general, and no one has unreasonable opinions (very reasonable and reasonable statistics are shown in Figure 6(a)). Experts have a high degree of recognition of the evaluation standards used in the current basketball special technical assessment (general, unreasonable, and unreasonable statistics are shown in Figure 6(b)). As the backbone of training high-quality sports professionals in the future, the sports training major is the most basic requirement to have a high professional and technical level, so it is very necessary to assess the students' mastery of special technical movements. It can be seen from the current assessment and evaluation plan that the difficulty of school's technical assessment and evaluation standards increases with the increase of students' learning difficulties, and the assessment difficulty of each semester increases with the increase of the difficulty of teaching content. The evaluation standard of progressive difficulty is set up, and the law of gradual and easy-to-difficult is followed. It effectively reflects the actual learning situation of students at each stage, which is helpful for students to standardize their movement techniques in their usual training, encourages students to work harder towards their goals, and guides teachers to regulate classroom teaching and improve teaching quality. The on-the-spot investigation also reflects that the assessment and evaluation standards are reasonable, effective, and comprehensive, and the feedback and motivational functions of the assessment and evaluation have been brought into full play. Therefore, the evaluation standard of progressive difficulty will continue to be used in the research on the evaluation method of basketball special technology in college sports training majors.

Among various assessment techniques, both students and teachers believe that the assessment content setting of passing technique is the most unreasonable, and the proportion of students who think it is the most unreasonable accounts for 26.3%, while the proportion of teachers is as high as 60%. Followed by mobile technology, 24.3% of students and 50% of teachers think its content setting is the most unreasonable. In the survey of the most reasonable technical assessment content, the shooting technology has the highest vote rate, and students think it is the most reasonable, accounting for 49.3%, nearly half. The teacher ratio is as high as 80%. It can be seen from the survey that there is no significant difference in the votes of students and teachers in each option, while teachers are more consistent with the most reasonable and least reasonable choices for technical content settings. Figure 7 shows the satisfaction of the basketball special technical assessment content setting.

93.4% of the students believed that the assessment method combining standard and technical assessment should be adopted in the assessment of special basketball skills. This assessment method has been widely recognized by teachers and students. The investigation of whether it is necessary to adopt the assessment method that combines compliance with technical assessment is shown in Figure 8.

Table 3 shows the results of the validation of the genetic algorithm for the basketball technical evaluation model.

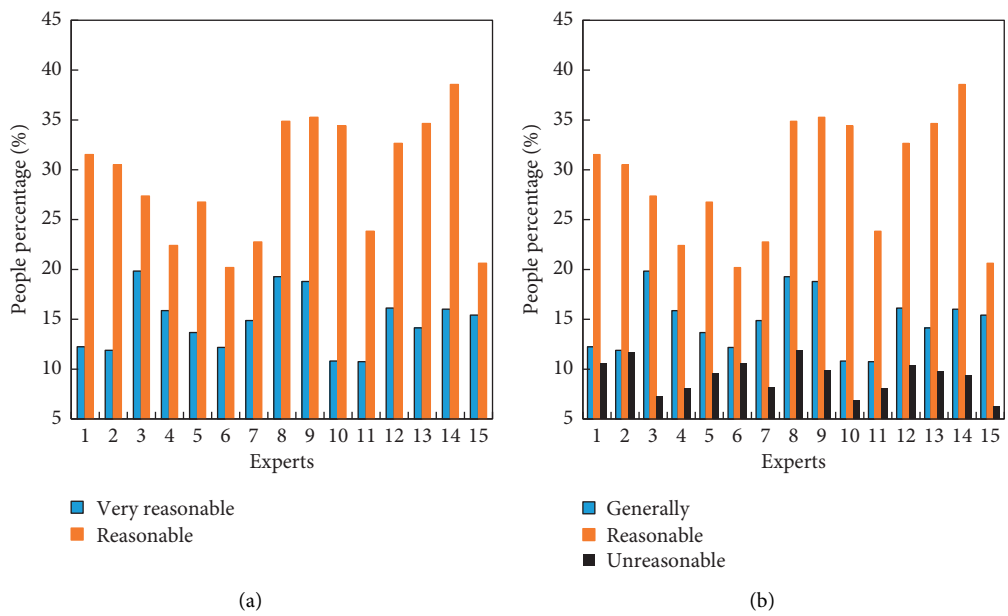

Figure 6: Setting test of basketball special technical assessment and evaluation criteria: (a) very reasonable and reasonably statistical. (b) general, unreasonable, and unreasonable statistics.

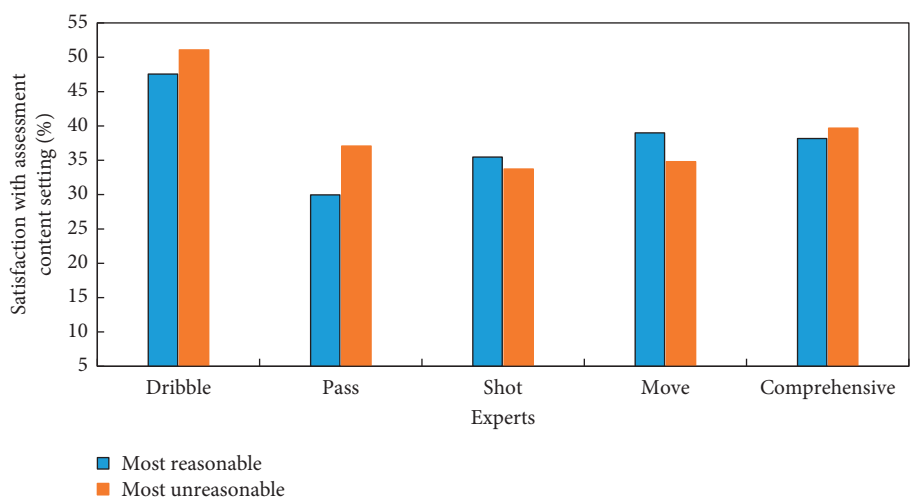

Figure 7: Satisfaction with the content setting of the basketball special technical assessment.

30 students were in the basketball general repair group to evaluate dribbling, shooting, passing, and moving skills. The results of the mathematical statistical test are shown in Table 4.

In the course of the research, how to arrange course teaching content reasonably should make the course teaching content meet the development of education, the needs of society, and the acceptance level of students, and at the same time, it should also conform to the training goal of physical education majors. According to the syllabus of the survey, the surveyed college divided teaching content into two parts. However, according to the field investigation, there are two schools that use theoretical teaching and even ignore the teaching of basketball theory. The teaching content of basketball lessons in different schools is shown in Figure 9.

The content involved in the theoretical assessment of the surveyed colleges and universities is the same as the theoretical teaching content in the general basketball syllabus of their respective schools, indicating that the content of the theoretical examinations in each school is basically the content taught in the theory courses. In terms of the training objectives of the physical education major, which are based on training students to become qualified teachers, we should strengthen the assessment of the theoretical knowledge and methods of students' basic basketball teaching methods. The content of the theoretical examination is shown in Table 5.

Through comparison, it can be found that the maximum and minimum comprehensive scores of male basketball players in colleges and universities who participate in training courses are larger than those who do not participate

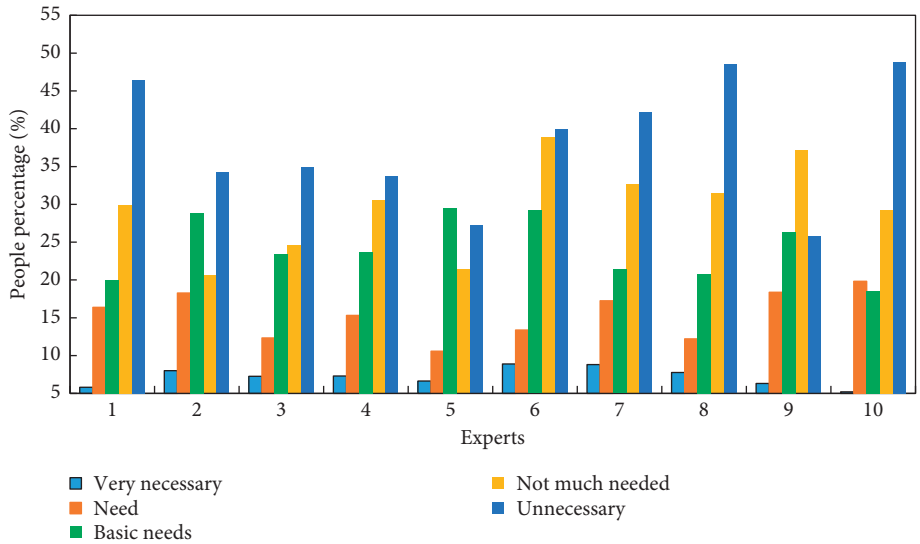

Figure 8: Investigation of whether it is necessary to adopt the assessment method that combines compliance with technical assessment.

Table 3: Validation results of genetic algorithm for basketball skill evaluation model.

Test sample	Scored by actual experts	Network output result	Absolute error	Relative error(%)
1	82	82.66	0.66	0.80
2	79	79.42	0.32	0.53
3	85	85.32	−0.89	0.38
4	70	69.11	0.75	1.27
5	83	83.75	−0.45	0.90
6	80	79.65	−0.78	0.56
7	76	75.22	−0.33	1.03
8	79	78.67	−0.47	0.42

Table 4: Mathematical statistical test results.

Project	Relative error	P	R
Dribble	0.62	0.80	0.95
Shot	0.47	0.53	0.96
Pass	0.49	0.38	0.99
Move	0.56	0.27	0.97

in training courses, and the performance span of students in training courses is smaller than that of students who do not participate in training courses. Comprehensive scores of the students in the training course are better than those of the students who do not participate in the training course. The score comparison of training class participation is shown in Figure 10.

5. Discussion

Physical education and sports training are essentially different. Although physical education also reflects learning and improving sports techniques in the teaching target areas, these techniques and skills are more important as a means to promote training to improve the level of competitive sports and obtain excellent results in competitive sports competitions, rather than considering the trainers. If you play the role of a coach in school physical education to guide and train students, it may make the teaching goal of physical education deviate from the direction, and leading to a series of problems such as students' loving sports but not liking to take physical education classes and the end of physical education classes means that students leave the beginning of physical activities and so on.

The fun and entertainment of basketball itself is deeply loved by the majority of young students and has a broad mass base in China. Therefore, whether it is the teaching education in primary and secondary schools or the professional technical courses, they have attached great importance to basketball as an important teaching content. The reason why basketball is valued by schools is related to the special function and value of basketball. For example, basketball not only pays attention to the acquisition of sports skills but also pursues the release of individuality and the satisfaction of interests, emphasizes unity and cooperation between individuals and groups, and encourages fair

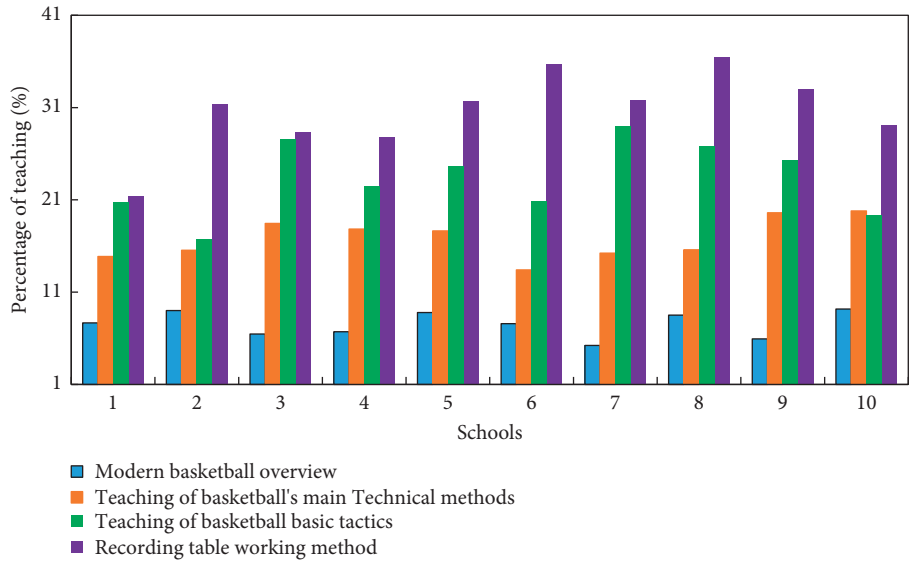

Figure 9: Teaching content of basketball lessons in different schools.

Table 5: Contents of the theoretical assessment.

Examination content	Involved or not	Frequency of occurrence	Percentage (%)
Modern basketball overview	Involved	5	83
Analysis and teaching of basketball's main technical methods	Involved	4	67
Analysis and teaching of basketball basic tactics	Involved	4	67
Basketball competition rules and refereeing method	Involved	5	83
Basketball competition organization and arrangement	Involved	5	83

competition. Basketball can promote health, including physical health, mental health, and social adaptation. Basketball can cultivate participants' physical qualities such as strength, endurance, speed, flexibility, and coordination, and at the same time, it also has a positive effect on psychology. It includes establishing a good self-evaluation, cultivating a strong will quality, enhancing self-confidence, and eliminating negative emotions and psychological pressure so that participants can learn to adjust themselves to adapt to changes in complex environments such as school and social life.

The teaching content of the general basketball course is too much, the difficulty is relatively high, and the students' learning foundation and other issues are not considered. Focusing on technology teaching, ignoring the cultivation of students' teaching ability. This leads to the problem of "Taking care of one thing and losing the other"; that is, students have a poor learning foundation, and the school's general courses have stipulated the number of hours, constantly breaking new records in people's vision, which is largely due to increased sports components. However, as a school sport, some high-tech teaching facilities will also ease the teaching process for teachers, and the high-tech intervention will let students know the correct way to learn. For example, the use of cameras in the classroom will be very good to correct the wrong movements of students in technical movements and at the same time deepen their understanding of technical and tactical skills.

Teachers are the organizers, leaders, and coordinators of teaching activities. Teachers, in all aspects, need to have the conditions to complete the teaching task. Therefore, teachers' educational background, teachers' training, further education, teachers' teaching attitude and ability, and teachers' teaching age all indirectly affect students' learning. After the basketball special course, it will inevitably affect some performances of students in all aspects, and their emotional performances will be particularly obvious. Generally speaking, the course is too boring, the method is not scientific, and the teacher's attitude is not positive, which will inevitably bring bad emotional performance to the students. On the contrary, if teachers are scientific in teaching methods and means, they can bring great benefits to students, and if every class is prepared, it is likely to bring good emotional performance to students.

Basketball is a very commercial sport, and its competitiveness and professionalism will make more people pay attention to this sport. Masses can pay attention to basketball in different ways and can also learn basketball through different platforms. However, for the college basketball students who use media the most, their absorption of basketball theoretical knowledge attracts the most attention. It is easy to list several common media methods to obtain the source data of college students' absorption of basketball theoretical knowledge, including basketball courses, exchanges between classmates, watching games on TV, and learning basketball news through the Internet or magazines.

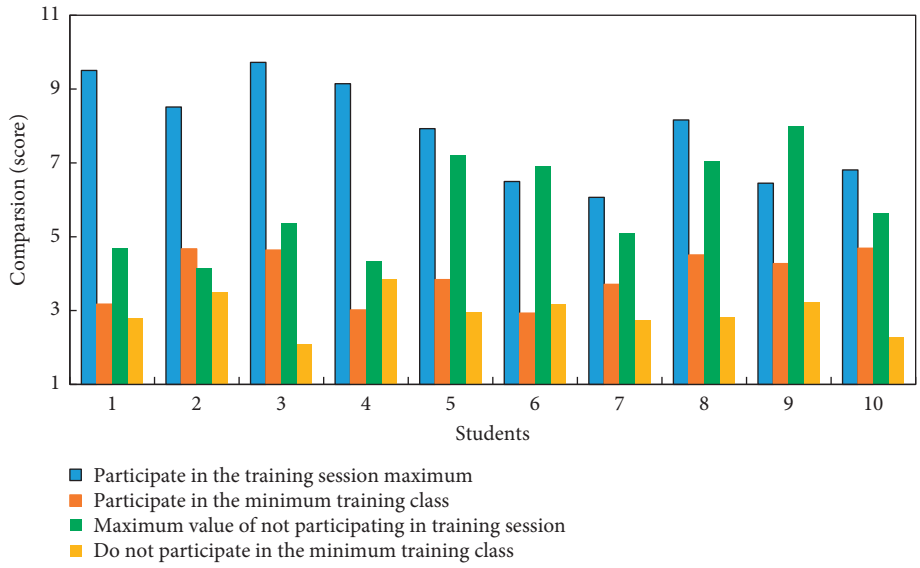

Figure 10: Score comparison of training session participation.

If students want to play activities, they must have sufficient venues and equipment as support. If the venues are too old or even damaged, students are likely to have bad emotions during basketball learning and even get injured in high-intensity confrontations. There are too few venues and equipment, and there is little space for students to play basketball after class. In addition, if the balls used in class are all used and worn out, they cannot make students have good interest in learning basketball courses.

6. Conclusion

With the increase in the setting of basketball games in colleges and universities, the basketball game further enhances makes the students' lives and sports have a good combination. In order to meet the reform, we should have more in-depth thinking on the teaching of basketball special courses in colleges and universities, so that the basketball courses can fully reflect the purpose of "all-round development of morality, intelligence, and physique." It can cultivate students' ideas of "lifelong sports" and better endow sports with students. This kind of value is not only reflected in the students' bodies, but also should include the students' psychological levels. It can be seen from the research that the assessment of basketball general courses is an important part of the information feedback and adjustment of the teaching process. Basketball assessment is relatively simple and mainly based on teacher assessment and summative assessment. The content of the assessment only considers knowledge and technology, and the assessment does not take into account the student's learning process and the embodiment of emotional goals, ignoring the student's dominant position.

Data Availability

No data were used to support this study.

Conflicts of Interest

The author declares that there are no conflicts of interest.

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