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Article

Application of biomechanical insights in the "Second Classroom Report Card" in mental health education for college students in the big data era

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Abstract: The construction of a comprehensive, reasonable, and scientific evaluation system for the mental health level of college students is a prerequisite for a high-quality mental health education. With the arrival of the big data era and the promotion and implementation of the "Second Classroom Report Card" system in colleges and universities nationwide, a new approach has been provided for the evaluation of college students' mental health level. The article deeply analyzes the main problems in traditional evaluation of college students' mental health level and explores how big data can enhance these evaluations. Furthermore, we introduce the biomechanical aspects that influence mental health, such as the impact of physical activity on psychological well-being and the role of movement patterns in stress reduction. Empirical analysis, it is proved that there is a strong correlation between the scores of college students' second classroom course projects—often involving physical activities—and their mental health level. By integrating biomechanical principles, we can better understand the physical factors that contribute to mental health, thereby enriching the evaluation framework. The establishment of "big data + biomechanical insights + mental health level" evaluation system based on the "Second Classroom Report Card" has improved the timeliness, pertinence, and scientificity of mental health education work in colleges and universities. This approach not only facilitates a more holistic understanding of student well-being but also promotes the importance of physical health in maintaining mental wellness.

Keywords: college students; mental health; evaluation system; big data; biomechanics; physical activity

1. Introduction

With the rapid development of society and economy, in the Internet Age with information explosion, Chinese college students are facing unprecedented changes in the world. The pressure from various aspects such as study, life, and work has posing a significant impact on the psychology of college students, leading to an increasing number of psychological issues among college students. Events such as suspension, dropping out of school, and even self-harm and suicide often occur due to psychological problems [1,2]. The work of mental health education in colleges and universities is facing enormous challenges, which requires continuous exploration of new ideas, methods to improve the pertinence and timeliness of the work [3]. Timely, scientific, systematic, and comprehensive evaluation of the mental health level of college students is a prerequisite for correct and efficient implementation of mental health education, and also a challenging point in mental health education. With the characteristics of large capacity, multiple types, fast speed, and high value, big data can be applied to evaluate mental health levels, which plays an important role in

college students' mental health education [4,5]. The second classroom is an important assist for colleges and universities in cultivating socialist builders and successors with "all around development of moral, intellectual, physical, aesthetics and labour education" [6]. The second classroom is closely related to the mental health of college students, and only with a good level of mental health can students successfully finish their education and achieve healthy and comprehensive development [7]. The "Second Classroom Report Card" is a quantitative reflection of the comprehensive qualities of college students in aspects of "moral, intellectual, physical, aesthetics and labour education". The launch of the "Second Classroom Report Card" provides a brand-new approach to apply big data technology and methods in the evaluation of the mental health level of college students.

2. The main problems in evaluating college students' mental health level

2.1. The main problems in the traditional evaluation of college students' mental health level

The evaluation methods for the mental health level of college students in China are mainly psychological assessment, feedback from counselors, psychological interviews, etc. Most colleges and universities generally distribute evaluation forms online to all students at the beginning of each semester, and based on the evaluation data, screen out students with abnormal results. The subsequent work is the focus on the mental health level of students with abnormal data therein, and for the students who do not show abnormalities, generally, special attention will not be paid afterwards. The main problems in the application of traditional evaluation methods are as follows:

2.1.1. Problems with the measuring tool

At present, the evaluation of college students' mental health in China is mostly based on simple surveys using existing scales introduced from abroad, among which SCL-90 (Symptom Check List-90) and PHQ-9 (Patient Health Questionnaire-9) are the most commonly used, followed by SDS (Self-Rating Depression Scale) and SAS (Self-Rating Anxiety Scale). These tools are standardized questionnaires or scales, but these tools may not take the unique experiences and situations for all individuals into account, resulting in inaccurate or incomplete evaluation results; At the same time, there are also problems with scale selection and applicability. Different scales may be designed for different scenarios and purposes, and unsuitable scales may lead to misleading results.

2.1.2. The data source is highly subjective

The main materials for psychological evaluation are related psychological scales, but the authenticity of the evaluation results is influenced by students' attitude, environment, self-service bias, and social desirability effect, thereby affecting the reliability and validity of the evaluation [8].

2.1.3. Dynamic adaptability is not high

The psychological health level of college students is dynamic, and psychological assessment is conducted once a semester, which cannot track students' psychological

changes in a timely manner. Also, in this case, it is not possible to provide feedback, adjustment, guidance, and iterative improvement of the psychological health level evaluation system in a timely manner.

2.2. The main problems in the application of big data in the evaluation of college students' mental health level

In the big data era and time of education reform, whoever occupies the big data of education is grasping the future of education [9]. With the increasing maturity of big data technology and its application in various fields, a new field for the further development of the evaluation for college students' mental health level has been therefore opened up, which is more conducive to the continuous optimization of evaluation standards, methods, and mechanisms for college students' mental health level. There is no significant theoretical breakthrough in designing a comprehensive, scientific, and reasonable "big data + mental health level" evaluation model and system for crawling, selecting, identifying, classifying, and analyzing massive data, which is specifically manifested in:

2.2.1. Poor integration of interdisciplinary research

The vast majority of psychologists lack the ability to apply big data in their work, and professional and technical personnel engaged in big data technology lack awareness of mental health education in colleges and universities. Psychologists only determine students' mental health levels based on psychological scales and feedback from counselors, and are unable to integrate academic information in educational administration system, hospital medical information, campus network browsing information, book borrowing information, dormitory management information, as well as consumption information and other data to conduct the assessment of students' mental health status, while it is difficult for them to integrate and analyze existing data, which results in difficulties in interdisciplinary and cross industry cooperation and collaboration.

2.2.2. The difficulty to obtain complete data on all platforms

Due to the fact that the information acquisition terminals related to big data for university students are in different departments such as the Academic Affairs Office, Network Service Center, Party Committee Student Work Office, School Youth League Committee, Library, Logistics Division, Security Division, etc., there is a lack of unified standards for data definition, management methods, workflow, and operation mechanism among information management system of different departments, forming unreachable "information island" and unbreakable "data barriers" [10].

2.2.3. Low security of privacy and data

The establishment of a platform for measuring the mental health level of college students using big data technology requires data collection in various aspects of college students' study, life, and more. It often involves a lot of private data, such as family information, relationship status, part-time work information, reward and punishment records, medical records, recent activities, browser history, etc. These are very sensitive data for college students [11,12], leading to the reluctance of relevant

departments in colleges and universities to share data, and educators may also have concerns about the use of big data.

3. The "Second Classroom Report Card"—A new approach for the evaluation of college students' mental health level of using big data

3.1. Connotation of "Second Classroom Report Card"

In 2018, the Central Committee of the Communist Youth League and the Ministry of Education jointly issued guidance on the nationwide launch of the "Second Classroom Report Card" in colleges and universities, pointing out that the "Second Classroom Report Card" system is a comprehensive design of the content, project supply, evaluation mechanism, and operation mode of the application of second classroom in colleges and universities. It fully draws on the educational mechanism and work system of the first classroom teaching, to achieve the scientific, systematic, institutionalized, and standardized second classroom activities. It serves as a work system that can record, evaluate, measure, and present the participation of college students in the second classroom, and by automatically generating a "Second Classroom Report Card" [13,14], it can be used for students to comprehensively record personal progress, universities to design full-cycle educational carriers, and enterprises to select personnel in a comprehensive way. The main content of the "Second Classroom Report Card" system includes course project system, record evaluation system, data information system, dynamic management system, and value application system [15]. The course project system is the foundation of institutional implementation, including the second classroom course projects that serve students' development, and it includes ideological growth, innovation and entrepreneurship, literature and sports, practical internships, volunteer services, work resumes, skills and specialties, etc.; The record evaluation system is a system implementation direction that is characterized with objectivity, realism, value, and simplicity. It scientifically records and authenticates student engagement in second classroom projects. Based on the specific situation, it uses the first classroom teaching evaluation mechanism for reference and adopts a "grades + credits" model; The data information system is the support for institutional implementation, and the information management platform of "Second Classroom Report Card" serves for the release, management, evaluation, and other aspects of the second classroom projects. It can record, evaluate, analyze, and present student engagement in the projects, and stimulate students' motivation for self-directed learning. The recognition, management, and supervision of the second classroom situation guided by teachers is very important to stimulate the external motivation of teachers to scientifically guide students; The dynamic management system is the guarantee for institutional implementation, which fully utilizes modern information technologies such as big data to analyze and evaluate student engagement in the second classroom, thus dynamically adjusting the system, as well as driving the improvement and iteration of the second classroom project. Also, it will form real-time big data information of the relevant organizations, modules, projects, students, teachers, and other objects of the second classroom, and provide dynamic guidance for students' healthy development; The value application system is the key to the

implementation of the system. The "Second Classroom Report Card" directly generated through the information management system can be used as a key reference [16] for students' comprehensive quality assessment, award and evaluation, promotion of joining the Party, postgraduate recommendation or entrance examination, internship and recruitment, and studying overseas during their school years. Colleges and universities are required to include the "Second Classroom Report Card" in students' personal files, and to present comprehensive quality of college students from multiple perspectives related to the first and second classrooms education.

3.2. Meaning of "Second Classroom Report Card"

The "Second Classroom Report Card" system draws upon experience from the educational mechanism and work system of the first classroom teaching, designs the overall content, project supply, evaluation mechanism, and operation mode of the second classroom, promotes the scientific, systematic, institutionalized, and standardized construction of the second classroom activities. Therefore, it makes student engagement in the second classroom can be recorded, evaluated, measured, and finally presented [17]. It is of great significance for all around development of moral, intellectual, physical, aesthetics and labour education.

The "Second Classroom Report Card" system is an urgent need to implement the fundamental task of establishing virtue and cultivating talents. The second classroom is a key path to adapt to the new development of higher education comprehensive reform and the new characteristics of college students' development, improve the student development service system, and therein, promote the students' comprehensive quality.

The "Second Classroom Report Card" system is an urgent need to implement the "Simultaneous Development of Moral, Intellectual, Physical, Aesthetics and Labour Education". The "Ideological Growth" course project focuses on the strengthening of ideological education and value guidance, as well as the guidance to cultivate ideal beliefs and noble character of students; The "Innovation and Entrepreneurship" and "Practice and Internship" course projects focus on the stimulation students' interest and potential in technological innovation and scientific research, as well as the cultivation of students' innovation spirit, entrepreneurial awareness, and innovation and entrepreneurship ability; The "Literature, Art and Sports" and "Work History" course projects focus on the guidance for students to shape a healthy body, cultivate cultural literacy, promote physical and mental harmony, as well as the develop the willpower, teamwork spirit, and ability to endure hardships; The "Volunteer Service" and "Skills and Specialties" course projects focus on the guidance for students to actively participate in activities such as public welfare and societies, in order to improve ideological awareness, sense of responsibility, and their skills.

The "Second Classroom Report Card" system is an urgent need to highlight the characteristics and improve the quality of talent cultivation. The first classroom mainly refers to traditional classroom teaching, while the second classroom, relatively speaking, refers to a variety of educational activities that are purposeful, planned, and organized for students outside of class [18]. The "two classrooms" are not

contradictory entities, but a community. The deep integration of the "two classrooms" is a practical need to adapt to the new requirements of national education policies and regulations, the development of comprehensive education reform in colleges and universities, and the new characteristics of college students' development. It is a practical move to improve the service system for students' development, promote the development of college students, and drive the implementation of the Double First-Class Initiative in China.

3.3. Key elements of the "Second Classroom Report Card" system description

In the second classroom information platform, a complete description of a second classroom course project in computer language requires at least five attributes: course project category, course project objectives, course project level, course project grades, and course project credits (as shown in **Figure 1**).

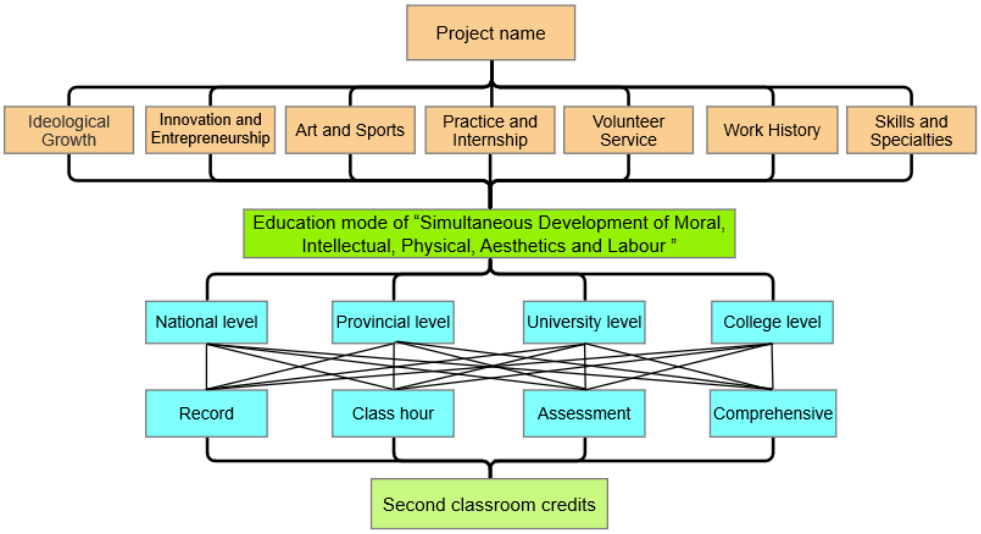

Figure 1. Diagram of course project system based on the "Second Classroom Report Card" information platform.

According to the objectives of the curriculum programs in the five areas of moral, intellectual, physical, aesthetic, and labor, the curriculum program categories are set separately, and the curriculum program categories are the foundation that determines the nature and main content of the curriculum programs. For example, the objectives of moral education correspond to the program category of ideological growth, and the curricular objectives of aesthetics and physical education correspond to the program category of arts, culture, and sports. The level of the course project reflects the difficulty and importance of the course program and is an important factor in determining the criteria for course program credit and grade evaluation. For example, credits are set at 1 to 5 in order of difficulty, from lowest to highest. The course project grade is an evaluation of the results achieved by the student upon completion of the course project and is an important basis for the student to receive credit for the course project. The grading scale for program performance is described in **Table 1**.

Table 1. Evaluation method of the second classroom course project and the conversion of corresponding centennial score.

Level / Method	A(5)	B(4)	C(3)	D(2)	E(1)
Inspection	Excellent	Good	Average	Pass	Fail
Honor/Award	First	Second	Third	Forth	-
Team ranking	Top three	Fourth to sixth	Other	-	-
Corresponding centennial score	95	85	75	65	45

The course project category included seven projects: Ideological Growth, Innovation and Entrepreneurship, Literature, Art and Sports, Practice and Internship, Volunteer Service, Work History, and Skills and Specialties; The course project objectives are scientifically quantified using the "Simultaneous Development of Moral, Intellectual, Physical, Aesthetics and Labour Education" model. The specific implementation method is to assign weight to students in five aspects such as morality, intelligence, physical fitness, aesthetics, and labor based on the second classroom course project, with a total weight value of 100%; The level of the course project reflects the level of the second classroom project, including national, provincial, university, and college levels; The course evaluation methods include record based evaluation, class hour based evaluation, assessment based evaluation, comprehensive evaluation, etc.; How to reflect the quality of students' performance in participating in the second classroom project is the key to evaluating students' performance in participating in the second classroom project. It has the characteristics of being easy to record and difficult to quantify. In order to avoid the impact of dimension, order of magnitude, and changing trends, it is necessary to standardize the evaluation of the second classroom. The "Second Classroom Report Card" information management platform draws experience from the mechanism of evaluating courses in the first classroom and converts them all into dimensionless pure numerical values. The implementation method is to use the principle of the five level evaluation method [19]. to convert common evaluation methods in the actual work of second classroom course projects into corresponding percentile grades (see **Table 1**); Course project credits reflect the corresponding credits obtained by students participating in a certain second classroom course project, which is essentially the importance of the second classroom course project. Factors such as the level, class hours, and degree of students' participation in the second classroom project are uniformly specified in colleges and universities' rules and presented in numbers.

In the second classroom information platform, the "grades + credits" evaluation mode can be used to record the grades and credits that students obtained in certain projects. Drawing on the calculation method of weighted evaluation grades for students in the first classroom, the cumulative and average grades of the second classroom course projects can be automatically calculated. This not only provides new ideas, perspectives, and carriers for the quantitative evaluation of students' second classroom project grades by using big data technology, but also offers a new path for big data to evaluate the psychological health level of college students.

3.4. Research on the correlation between the average score of college students in the second classroom and their mental health level based on the "Second Classroom Report Card"

Moral education is the value orientation of mental health education. Moral education promotes the unity and balance of students' physiological, psychological and social systems on the basis of shaping their complete personalities and moral qualities, which can help students establish self-identity, interpersonal identity and social identity, and stimulate pro-social motivation and achievement motivation. Intellectual education is a prerequisite for mental health education, which develops mental qualities such as memory, thinking and imagination. Mental health education is the further development of a student's mental potential based on the student's existing level of mental ability through the cultivation of positive mental qualities such as observation, attention and imagination in order to obtain the optimal development of the student's own abilities. Physical education is the physical foundation of mental health education. Sports can strengthen students' ability to regulate their emotions and enhance their sense of teamwork; in terms of the psychosocial development of human beings, the spirit of cooperation is a higher level of social emotion in their psychosocial development, and plays an important role in fostering the spirit of collectivism, as well as in fostering sincere unity and cohesion in the team. Music, painting, dance and other arts education activities are an important means of mental health education, so that the beauty of the arts can continue to inculcate and enlighten the minds of students, thereby maintaining mental health and harmony. Labor education can cultivate students' positive psychological qualities of hard work, perseverance, and overcoming difficulties, and it is also conducive to the development of their survival ability, career planning ability, and creativity.

The all around development of moral, intellectual, physical, aesthetics and labour education of college students shall be based on psychological health. The "Simultaneous Development of Moral, Intellectual, Physical, Aesthetics and Labour Education" cannot be separated from "psychology". The study of psychology runs through the all around development of moral, intellectual, physical, aesthetics and labour education of college students. The psychological education and the simultaneous development of the five aspects form an organic whole through the two-way interactive relationships, exerting the concurrent educational role [7]. of "cultivating morality, promoting intelligence, strengthening the body, develop sense of beauty, and educating hard-working spirit along with the study of psychology". A higher level of mental health can help college students form noble moral character, increase their knowledge and ability, invigorate health effectively, shape their sense of beauty, and have a will to work. On the contrary, the comprehensive performance of college students in various aspects of morality, intelligence, physical fitness, aesthetics, and labor can to some extent reflect their mental health level. The "Second Classroom Report Card" is a quantitative presentation of the level of all around development of moral, intellectual, physical, aesthetics and labour education for college students, and is also an important indicator to reflect their mental health level.

At present, the information collected from big data technology in colleges and universities, such as students' dormitory entry and exit records, consumption records

within campus, and book borrowing records, belongs to various departments such as the Security Management Department, Information Center, Logistics Division, Library, etc. The information is scattered and too fragmented, which is not easy to integrate, analyze, and feedback [20], and cannot be directly applied to the examination of college students' mental health level. At present, colleges and universities are vigorously promoting the construction of the "Second Classroom Report Card" system, integrating the resources of the entire school, facilitating the collection and integration of big data. Students can apply for projects on the Second Classroom Management Platform according to their preferences, upload completed certificates on the platform, which will be recognized by teachers and relevant departments therein. The content of the "Second Classroom Report Card" involves various aspects of students' academic performance during their school years, which can scientifically, comprehensively, and systematically reflect the level of every student's comprehensive performance during his/her school years, while also indirectly reflecting their psychological health level.

The various kinds of activities in the second classroom can help college students reduce learning pressure, develop anti-pressure ability, enhance social relationships, and promote personal growth, thereby improving their mental health level. Therefore, the "Second Classroom Report Card" corresponds to the psychological health level of college students. Based on this, this article adopts empirical analysis methods to study the relationship between the average score of college students in the second classroom and their mental health level based on the "Second Classroom Report Card". To ensure the authenticity and effectiveness of the research results, the data in this study were obtained from the raw data exported from the psychological assessment system and the second classroom information management platform of a university. Data from all second-year students at a college within this university were extracted, totaling 728 students. During data preprocessing, records with psychometric assessment durations of less than 2 min and more than 10 min were excluded, resulting in a sample of 705 students after data cleaning. Subsequently, the psychometric assessment data and second classroom grades of these 705 students were standardized. The mean of their mental health assessment questionnaire scores taken at the beginning of two semesters in September 2022 and March 2023 was used as the dependent variable Y. (The assessment system sets a psychological assessment score of 10 and above as abnormal, with higher scores indicating a greater psychological crisis.) The average score of the second classroom grades earned by students in the 2022 to 2023 school years is used as the independent variable X. Based on regression theory, a correlation analysis was conducted based on the results of psychological health assessment and the average GPA data of sample students in the second classroom based on the "Second Classroom Report Card". It was found that the psychological health level of students in this college is significantly correlated with their GPA in the second classroom. Specifically, (as shown in **Figure 2**), the results indicate that the adjusted R2 is 0.81, indicating a significant overall regression effect and explanatory significance for the variable(s). The psychological measurement scale is primarily utilized to assess the level of students' mental health. Generally, lower scores indicate better mental health. The data sampled in this study indicates that a scale score of 10 or above is considered indicative of psychological abnormality, whereas a score below 10 signifies normal

psychological health. Statistical analysis reveals that higher initiative in participating in extracurricular activities correlates with higher scores in those activities. Consequently, it can be concluded that, in general, higher engagement in second classroom performance among college students is associated with higher mental health levels. However, when this engagement reaches 200 or above, there is a reverse fluctuation in students' mental health levels. This is attributed to the high expectations these students place on themselves and the subsequent pressure they experience in striving for excellence in all endeavors, which may induce nervousness and stress, albeit remaining within the normal range of mental health.

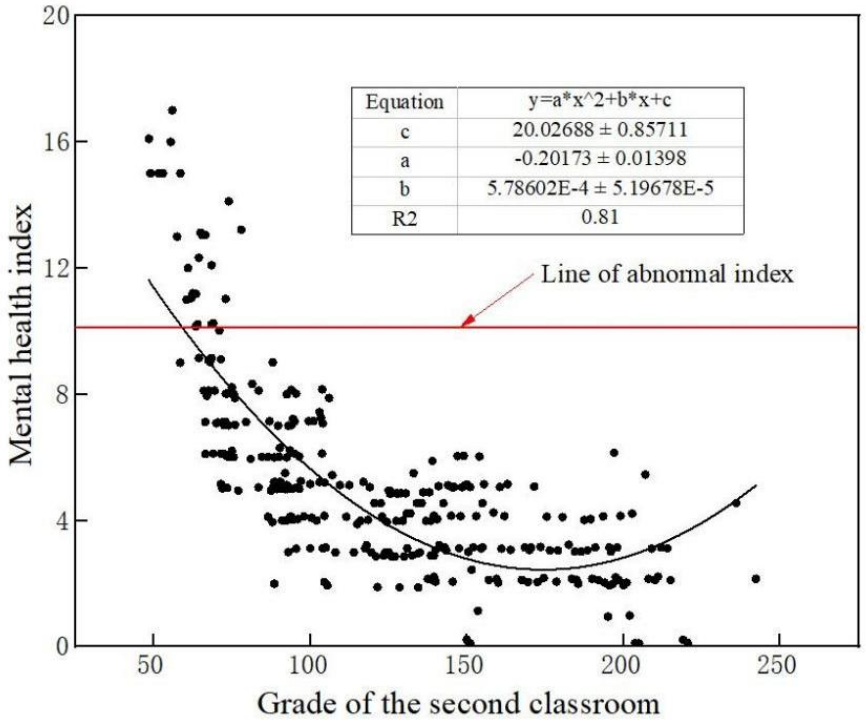

Figure 2. Regression of psychological health assessment results and corresponding average grade of college students in the second classroom.

4. The Construction of the evaluation system of "big data+ mental health level" based on the "Second Classroom Report Card"

4.1. A model of college students' morality, intelligence, physical fitness, aesthetics, and labor based on the "Second Classroom Report Card"

In the "Second Classroom Report Card" information management platform, the "grades + credits" evaluation mode can be used to record the grades and credits of the course projects that students have participated in, and the total and average grades can be automatically calculated. Then, combined with the ability cultivation model of "moral, intellectual, physical, aesthetics and labour education" of the second classroom course project, scientific quantification can be carried out. Finally, the performance points during the whole process of college students in the five aspects were calculated, forming a model of college students "morality, intelligence, physical fitness, aesthetics, and labor" growth experience and ability based on the "Second

Classroom Report Card" (as shown in **Figure 3**). In this way, the pertinence, scientificity, and timeliness of college mental health education work were improved, which is helpful to cultivate socialist builders and successors with all around development of "moral, intellectual, physical, aesthetics and labour education".

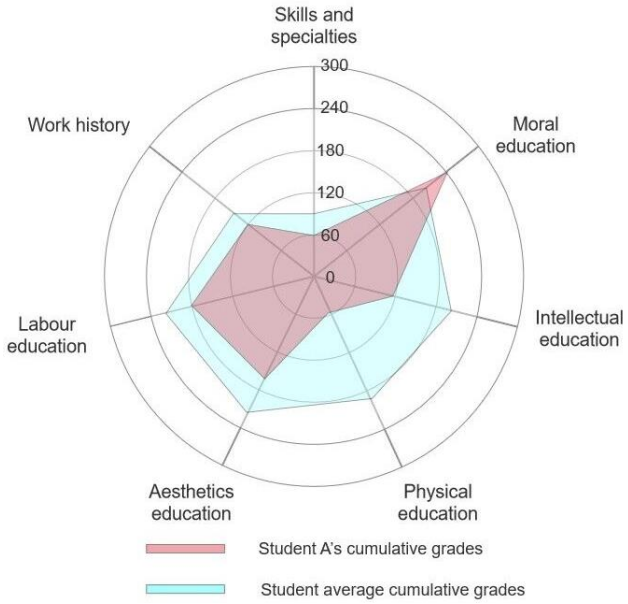

Figure 3. Model of "moral, intellectual, physical, aesthetic, and labor" abilities of college students.

4.2. An evaluation model for the mental health level of college students based on the "Second Classroom Report Card"

Based on the above empirical analysis, it is found that the psychological health evaluation results of students in the college are significantly correlated with the scores of their second classroom. Therefore, a psychological health level evaluation model for students in colleges and universities based on the "Second Classroom Report Card" can be established to transform the examination of psychological health level into the evaluation of the average score of the organization's students in the second classroom; A systematic, scientific, and intelligent evaluation of students' mental health level can be conducted based on their achievements in the five aspects of morality, intelligence, physical fitness, aesthetics, and labor. A bar graph featuring big data for evaluating college students' mental health level based on the "Second Classroom Report Card" can be formed (as shown in **Figure 4**), providing effective reference for colleges and universities to evaluate college students' mental health level. From **Figure 4**, it is evident that students majoring in G at the college achieve the highest grades in the second classroom, suggesting that the overall mental health level of these students is, to some extent, superior to that of students from other majors. Conversely, students majoring in H exhibit the lowest grades in the second classroom, which may imply that a significant proportion of students in this major could be experiencing psychological difficulties. A further analysis of the components of the 'Second Classroom Report Card' is required to ascertain whether students have psychological issues and to identify the specific aspects of these psychological problems.

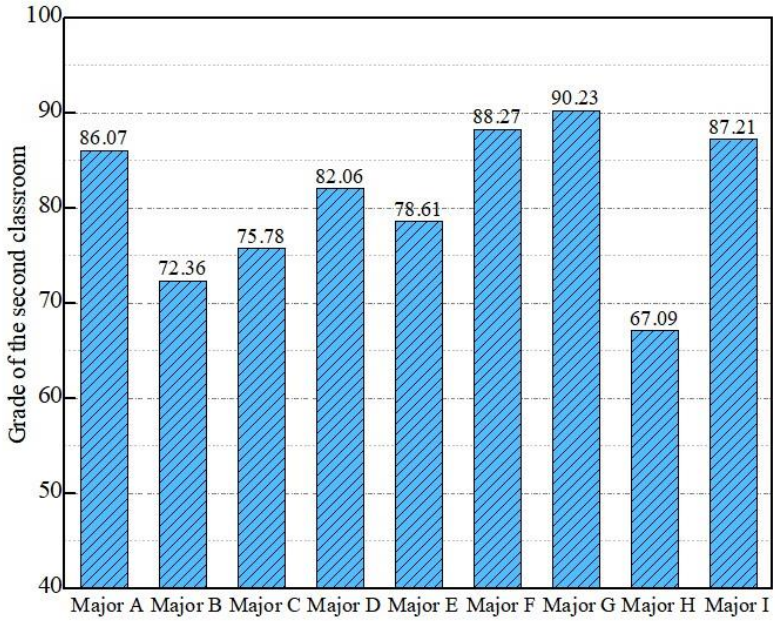

Figure 4. Bar graph featuring big data for evaluating college students' mental health level based on the "Second Classroom Report Card".

For students achieving lower grades in the Second Classroom, further research into potential contributing factors can be conducted to promptly ascertain whether these students are experiencing psychological distress and to subsequently provide corresponding adjustments to mental health interventions. The Second Classroom Report Card for college students encompasses five modules: morality, intelligence, physical fitness, aesthetics, and labor. Each module's performance is presented in detail within the Report Card. This meticulous classification aids in inferring potential psychological issues based on students' specific participation patterns. For instance, some students exhibit a preference for independent activities, such as lectures and online assessments, over those requiring teamwork, including volunteer work, cultural events, or sports. Students displaying such preferences may face difficulties in interpersonal communication and may necessitate targeted mental health support. Consequently, by closely monitoring the dynamic changes reflected in the Second Classroom Report Card, we can enhance the timeliness and relevance of mental health monitoring, thereby addressing potential psychological distress among students more effectively.

5. Conclusion

There exists a close and mutually reinforcing relationship between the comprehensive development of college students' morality, intelligence, physical fitness, aesthetics, and labor skills, and their mental health. The advancement in these areas—morality, intelligence, physical fitness, aesthetics, and labor skills—must be grounded in good psychological health qualities, serving as a prerequisite for their holistic development. The cultivation of these facets not only contributes to the enhancement of college students' mental health quality but also reflects, to a certain extent, their mental well-being. The scores obtained in the five dimensions of the second classroom activities can serve as indicators of college students' mental health

status. College student affairs personnel can address the gaps in continuity and timeliness in mental health monitoring by monitoring dynamic changes in extracurricular grades and correlating them with students' mental health status. This approach enables timely assistance and psychological counseling, particularly in areas of interpersonal communication. Furthermore, to diversify the formats of mental health education in universities and enrich the educational experiences for college students, psychological health-related content, such as micro-courses, micro-movies, and lectures on mental health, can be incorporated into the second classroom activities.

This article takes the national promotion and implementation of the "Second Classroom Report Card" system in colleges and universities as a starting point, and uses the "Second Classroom Report Card" information management platform developed and designed by a certain college and its accumulated raw data in the past two years as the research object. The article systematically sorts out the scientific connotation of the "Second Classroom Report Card" and forms a management system description paradigm for the "Second Classroom Report Card" system. Through empirical analysis, it has been found that the average score of college students in the second classroom based on the "Second Classroom Report Card" is significantly correlated with the quality assessment of mental health education for the students. Therefore, the article provides a solid theoretical basis for constructing the "big data + mental health education" evaluation system based on the "Second Classroom Report Card". A "big data + mental health level" evaluation system based on the "Second Classroom Report Card" has been formed, which enhances the pertinence, scientificity, and timeliness of the evaluation of mental health level in colleges and universities, and helps cultivate socialist builders and successors with all around development of "moral, intellectual, physical, aesthetics and labour education".

Generally, it has certain theoretical and practical value. In the future, the author will continue to look for the use of big data-based methods to explore the laws between the second classroom and mental health education, deeply explore the application of the second classroom education in mental health education, thus to carry out educational activities accurately. By using data mining, the author will endeavor to demonstrate the inevitability of the second classroom and students' growth and success in a scientific way. Therefore, it will provide a referable "roadmap" for college and university workers to offer guidance for students in their academic and career planning, provides targeted suggestions for their development, and provides a basis for decision-making for colleges and universities, which drives the reform of talent cultivation mode.

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