

time to adapt to social changes, graduate students begin to be impatient under the dual pressure of study and employment. I feel anxious about how to get high scores on exploratory topics, about the unsatisfactory employment prospects, and at a loss about the uncertainty of the future. Under the effect of multiple anxiety, the pressure of graduate students increases sharply. If the school does not intervene in time, it will have very serious consequences. In addition to the real external pressure, the reason for graduate students' psychological anxiety is that graduate students' own psychological quality is not qualified. Lack of awareness of their negative emotions or emotional fluctuations will also lead to graduate students' irritability or depression; or you can be aware of your emotions, but you can't control your emotions well. In view of this situation, graduate students can divert their attention through other things, such as talking to friends or family, expressing their troubles to their tutors, and alleviating anxiety symptoms with the help of others. At present, anxiety disorder is very obvious in graduate students who are about to graduate. With the approaching of graduation time, their pressure will be greater and greater. In view of the anxiety of graduate students under employment pressure, certain preventive measures must be taken to reduce the probability of graduate students' anxiety disorder.

Objective: To establish a public elective course of mental health and guide the psychological status of postgraduates. Under the tutor's mental health training, we should pay more attention to the changes of Postgraduates' psychological status, so that postgraduates' anxiety disorder can be intervened in time. In addition, expand the main body of psychological education, involve professional teachers, parents and friends, help graduate students get out of anxiety from multiple aspects, and let graduate students realize that anxiety can be alleviated and cured, so as to correct their mentality, so as to better control their emotions.

Research objects and methods: The research objects were graduate students. 580 graduate students of different grades and majors were randomly selected from 14 universities by stratified cluster random sampling. A total of 580 questionnaires were distributed. The effective questionnaires and effective rates were 546 and 94.14% respectively. The self-rating Anxiety Scale (SAS) compiled by Zung is used. The scale contains 20 items. The number of positive and negative scores are 20 and 5 respectively. The standard score is the sum of the scores of each item multiplied by 1.25. 50 points is the boundary value. Scores above 50-59, 60-69 and 70 indicate mild anxiety, moderate anxiety and severe anxiety respectively. The data collected from the questionnaire were statistically processed by SPSS software to analyze the anxiety of graduate students after taking intervention measures.

Results: The relevant data were statistically analyzed by SPSS software. The anxiety scores of graduate students in different grades are shown in Table 1.

Table 1. Anxiety scores of graduate students in different grades

Major	Academic anxiety	Social anxiety	Employment Anxiety
First year graduated school student	43	45	51
Second year graduated school student	48	43	53
Third year graduated school student	50	41	56

In Table 1, among the three anxiety scores of academic anxiety, social anxiety and Employment anxiety, the students of grade 1, grade 2 and grade 3 have the highest score of Employment anxiety. In particular, the students of grade 3 have a score of 56, which belongs to mild anxiety. This degree of anxiety will not have a great impact on graduate students, but will promote them to maintain a positive state to face graduation. Among the other two kinds of anxiety, the score of social anxiety is relatively small, indicating that graduate students pay more attention to academic achievement. Among them, the academic anxiety score of the third-year students is 50, which just reaches the level of mild anxiety.

Conclusion: By establishing public elective courses of mental health and tutor mental health training, we can dredge the anxiety of graduate students in time, which can effectively control the anxiety of graduate students within a certain range, not only do not affect the mental health of graduate students, but also promote graduate students to maintain a positive state.

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APPLICATION OF BOXPLOT IN EXAMINATION RESULTS BASED ON PSYCHOLOGICAL EVALUATION

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Background: Examination is one of the methods to test students' knowledge mastery, and examination result is one of the best ways to know students' knowledge mastery. School when evaluating the student's test scores, general according to more than 90 points for the best, from 80 to 89 was divided into good, from 70 to 79 was divided into medium, 60 to 69 divided into general, below 60 points for the poor, this simple division overlooking the difficulty degree of test paper as well as the overall level of the class, the conclusion may have certain deviation and the actual situation, It is not conducive to students' mental health development, and it is difficult for parents to intuitively understand students' learning level. Proper analysis and evaluation of students' examination results can help students to find out the reasons for their mistakes, stimulate learning motivation and enhance learning consciousness; It can also help teachers quickly understand the students' learning situation, objectively evaluate the students' learning effect, improve the course teaching plan, optimize the classroom teaching method, and build a more conducive to the communication between teachers and students of the examination evaluation method. Therefore, this article carries on the statistical analysis to the seventh-grade examination result of a middle school, and carries on the corresponding analysis and evaluation to the students' results combined with the boxplot, in order to improve the traditional simple evaluation.

Study design: This paper in class one, grade seven boxplot combining a statistical analysis of test scores of Chinese, math, English is a new evaluation of examination of three disciplines, this evaluation method has changed the traditional evaluation method, can protect the privacy of students and students, parents and teachers can intuitively understand to the students' personal grades and class as a whole.

Subjects and methods: The boxplot is a statistical graph used to show the dispersion of data. It was invented by John Tukey, a famous American statistician, in 1977. The drawing of the boxplot relies on actual data without assuming that the data follows a specific distribution form. There is no restriction on the data. It just shows the true and intuitive appearance of the data distribution shape, as shown in Figure 1.

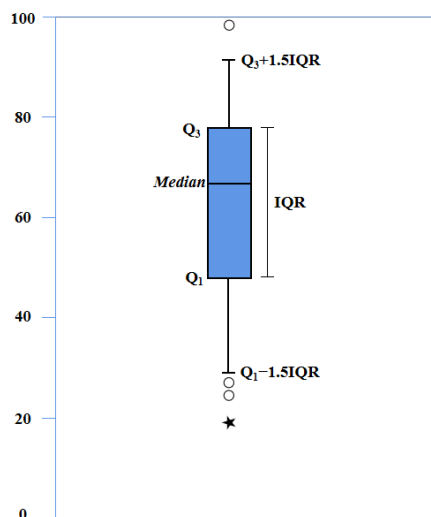


Figure 1. Box diagram

Methods of statistical analysis: According to the characteristics of the boxplot, when the test scores follow the normal distribution, as shown in Figure 2-2, the test evaluation levels are divided as follows. In Figure 2-2, the rectangular area from Q1 to Q3, that is, 50% of the students in the class are classified as average, the area from upper quartile Q3 to upper adjacent value (Q3+1.5IQR), 24.65% of the students in the class are classified as good, and the area from lower quartile Q1 to lower adjacent value (Q1-1.5IQR), 24.65% of the class was classified as average, and the areas above the upper adjacent value (0.35% of the class) and below the lower adjacent value (0.35% of the class) were classified as excellent and poor respectively. By analogy, if the test scores do not obey the normal distribution, we can also divide the test evaluation levels by using the boxplot to conduct correlation analysis on the test scores of students, as shown in Figure 2-3.

Results: Taking the monthly test scores of Chinese, mathematics and English of 41 students from Class 7 (3) of the school in October as an example, visual analysis was carried out through boxplot. In Figure 4, each boxplot corresponds to one course respectively. It can be seen from the three different medians that, among the three courses, the median score of English is the highest and that of mathematics is the lowest.

From the discrete degree of test scores, the box of Chinese score is the shortest, indicating that the distribution of Chinese score is relatively concentrated. The box of English score is the longest, indicating that the distribution of English score is relatively scattered.

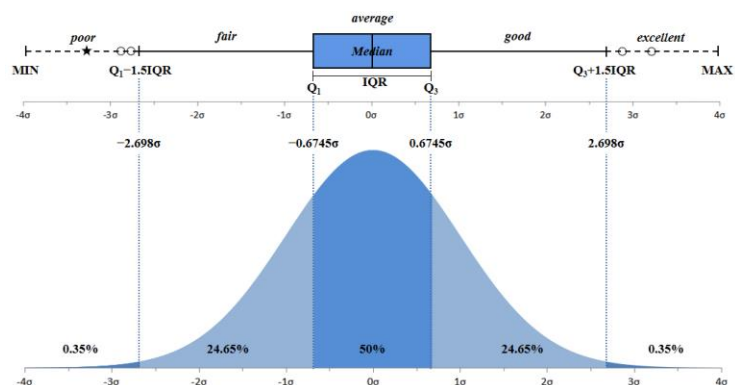


Figure 2. Comparison between boxplot and normal distribution

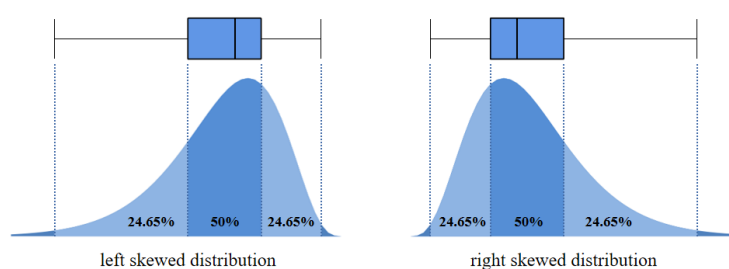


Figure 3. Comparison of box plot and skewness distribution

According to the analysis of the Chinese score, the Chinese score of the monthly test was relatively concentrated, and 50% of the students in the class scored between 67.25-86.5. Because the scores are more concentrated, the students' learning level lacks a good distinction. One language result in abnormal value, is located in the adjacent values, one student in the examination of language achievement test is not ideal, teachers need to focus on the student, with more communication, understand their learning difficulties in their life, help the cause analysis, and make students able to quickly grow up from a temporary setback. In addition, the box corresponding to Chinese scores is not symmetrical about the median, and the median is larger than the average, showing a left-biased distribution. This situation may be caused by the following reasons: First, outliers affect the average. Second, the difficulty of the Chinese test is low, so it is easier for the students. Third, teachers' grading standards for examination papers are wide and not strict enough. Combined with these reasons, teachers can adjust and improve in the following three aspects, strengthen the communication with backward students; Raise the difficulty of examination questions appropriately. Refine the grading standards and be strict in marking papers.

On the analysis of the math score, the math score of the monthly examination is more scattered than the Chinese score, and there is a good distinction between the students' learning level. And after the normal test to obey the normal distribution, we can infer that the difficulty of the math paper is moderate, more in line with the actual situation of students at this stage. There were no outliers in math scores, and 50% of the class scored between 54.5 and 93.0, with a small number of students achieving high scores and a small number of students performing poorly.

On the analysis of English scores, English scores are the most scattered in this exam, and there is a good distinction between students' learning levels. 50% of the students in the class scored between 51.5 and 97.0. In this exam, a small number of students scored high, and a small number of students scored low. There are no outliers in English scores, and students' scores are distributed between the upper and lower adjacent values, which obey the normal distribution after the normal test. It can be inferred that the difficulty of the English test paper is moderate, the students' learning effect is good, and the information feedback from the test results is good.

Comparative analysis of students' scores with boxplot can not only protect students' privacy, but also understand the relative level of students' scores, help students adjust their state in time, and promote the two-way healthy growth of students' psychology and learning. Below, we take the results of three students randomly selected from Class 7 (3) as an example and observe and analyze them in combination with the boxplot.

In Figure 5, the three boxplots correspond to the Chinese, mathematics and English courses of Class 7 (3) respectively, and the box area represents the distribution of intermediate scores of 50% students in the class. The black circle, yellow square and red triangle represent three students C3, C7 and C19 respectively.

Through comparative analysis of the three grades, we found that only rely on performance to judge the students' learning level and learning value is not comprehensive, and the comparison of using boxplot, can pass the exam scores necessary information feedback, can protect the privacy of the performance of the care for the students to grow, are beneficial to the healthy development of student's body and mind, And can let students, parents and teachers more comprehensive understanding of learning, is conducive to promoting teachers and students and parents of mutual communication, is conducive to students timely adjustment of learning status, learning plans, learning methods, but also conducive to teachers timely improvement of teaching plans, teaching content and teaching methods.

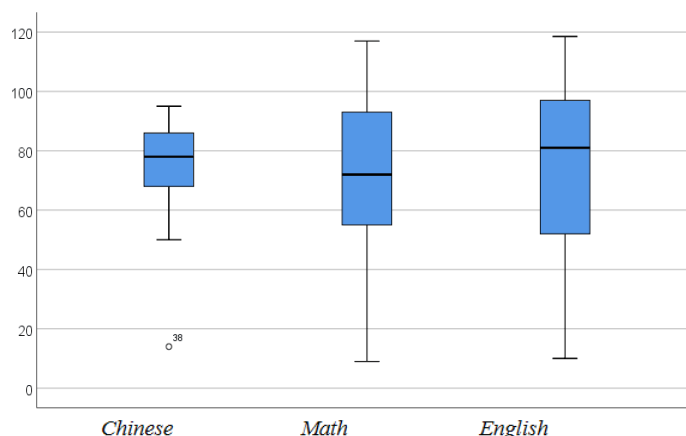


Figure 4. Box chart of foreign language scores of classes 7 (3)

Table 1. Monthly examination results of three students in October

Name	Graphic	Language	Mathematics	English
C3	▲	86	82	109.5
C7	●	77	44	106
C19	■	95	86	83

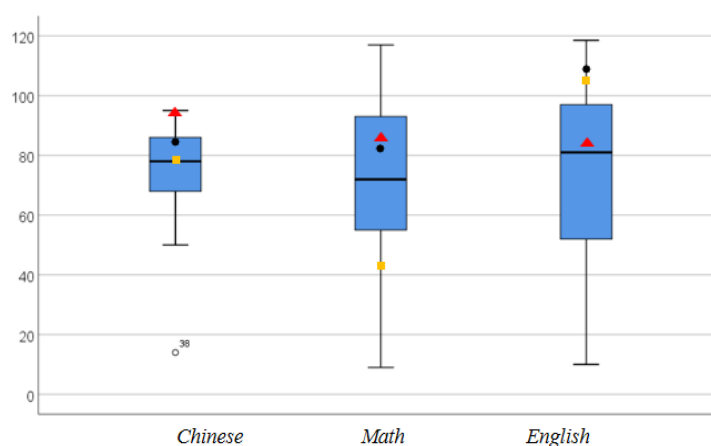


Figure 5. Score distribution of the three students

Conclusions: The evaluation method of examination result based on boxplot has changed the evaluation standard of 90 excellent and 60 pass which is deeply rooted in traditional teaching. This method combines the scientific evaluation method to connect the student's individual score with the class's overall score. To the student's personal information, the students' test conditions shown in the boxplot, both protect the privacy of the student's result to respect the students, at the same time can make students and parents intuitive understanding to the whole class and students learning situation of the individual, is advantageous to the healthy growth of the students, for students and parents properly plan adjustment, It is beneficial to promote the communication between teachers and students, teachers and teachers. When evaluating students' performance, teachers are not limited to individual students or single subjects, which can

increase the dimension of comparison. Therefore, teachers' evaluation will be more objective and comprehensive.

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PROBLEMS AND COUNTERMEASURES OF MENTAL HEALTH EDUCATION IN RURAL SCHOOLS

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Background: It is the consensus of educators to deepen educational reform and promote the development of quality education. The school should cultivate people who are physically and mentally healthy, with all-round development of knowledge and ability, sound personality and good personality to adapt to the society. This educational thought pays attention to the all-round development including people's psychological quality, and paying attention to the cultivation of psychological quality must pay attention to mental health education. Mental health education is an important part of quality education. Since the rise of mental health education in mainland China in the 1980s, many experts, scholars and educators have invested a lot of energy in the research of mental health education. However, most of their eyes focus on China's economically developed areas, and pay less attention to the majority of rural schools.

Subjects and methods: With the continuous improvement of modern social and economic level, people's ideological, cultural and moral quality has been gradually improved. More and more people pay more attention to mental health problems, and school mental health education is a part that cannot be ignored by educators. In recent years, rural school mental health education has attracted extensive attention, there is no regional difference in attaching importance to school mental health education, and rural school mental health education also needs attention. This paper briefly expounds some problems still existing in rural school mental health education and the countermeasures to solve these problems.

Study design: The shadow of exam-oriented education has been perplexing the majority of primary and secondary school students. In addition, rural parents themselves suffer from less reading and place their hopes on their children. Rural primary school students bear great learning pressure, and because they are left behind children, they have nowhere to tell when they encounter pressure. This accumulated psychological pressure causes primary school students to move forward with heavy load in learning, and its main performance is learning and examination anxiety. With high expectations and worry about not doing well in the exam, they are nervous, impatient, rapid heartbeat, dizziness, sweating, poor sleep, decline in learning efficiency, exaggerating failure, fidgeting, making random answers, leaving the exam room too early, etc. As the normal level cannot play, it is easy to fail in the exam. We learned from the survey and interview that lack of sleep, decline in learning efficiency and random answers are the most prominent external manifestations of rural primary school students' learning and test anxiety. (1) Difficult parent-child communication. (2) Self-blame tendency. (3) Anxiety about self-image.

Methods of statistical analysis: School education, family education and social education are studied by means of investigation and analysis and literature review.

Results: Change the concept of mental health education in rural schools. School is the main place for students to receive education. If there is a deviation in the concept of mental health education in a school, when students encounter psychological problems, they will have no way to seek help and difficult to solve, which will gradually affect the development of students' mental health. Therefore, for rural schools, we should scientifically understand the objectives, objects and contents of mental health education, we should timely break the old ideas and realize the importance of mental health education to students. We must fully understand students rather than judge them by traditional exam-oriented education. We should not only care about students' academic achievements, but also pay attention to students' physical and mental health growth. Education management departments can also regularly carry out teacher training and Symposium on mental health education, more practically and effectively assist rural schools to establish a correct concept of mental health education and promote the benign development of mental health education: a. Improve the management system of mental health education. b. Construct the network system of mental health education.

Conclusions: The mental health education of rural school students is an easy problem to be ignored in the current education system. The mental health problem of primary school students is by no means an