International Journal of Sociologies and Anthropologies Science Reviews
Volume 5 Issue 4: July-August 2025: ISSN 2985-2730
Website: https://so07.tci-thaijo.org/index.php/IJSASR/index

# The Effect of Teaching a Mental Health Education Course Based on Blended Learning Combined with Evidence-based Learning for Enhancing Mental Health Quality of First-Year Students in Chongqing Polytechnic University of Electronic Technology

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Received 18/02/2025 Revised 27/02/2025 Accepted 27/03/2025

**Abstract**

**Background and aim:** With the progress of the times, the current mental health education courses in Chinese universities can no longer fully meet the psychological development needs of students. To enhance the fun of the course, increase students' participation and practicality, and promote the improvement of students' mental health quality. The aim of this study was: 1) Students who participate in the blended learning and evidence-based learning mental health course will show significantly higher mental health quality scores compared to the baseline. 2) To examine the impact of a blended learning and evidence-based learning mental health course on students' learning achievements and mental health quality at Chongqing Polytechnic University of Electronic Technology, with the standard set at 70%.

**Methodology:** The study involved 200 first-year students at Chongqing Polytechnic University of Electronic Technology. A sample of 30 students was selected from a mental health course using cluster random sampling. The research instruments were lesson plans, a student's learning achievement test, and a student's mental health quality self-evaluation. Experimental design is a one-group pre-test and post-test design. Data were collected and analyzed by means, standard deviation, t-test for one sample, and t-test for dependent samples.

**Results:** After studying the mental health education course based on blended learning combined with evidence-based learning, students' learning achievement was higher than before, and students' mental health quality after implementing the mental health education course was higher than the determined criterion of 70%.

**Conclusion:** The development of a mental health education course based on blended learning combined with evidence-based learning has a significant effect on enhancing mental health quality for students. Furthermore, significant improvement in students' learning achievement.

**Keywords:** Mental Health Education Course; Blended Learning; Evidence-based Learning; Students' Learning Achievement; Mental Health Quality

## Introduction

Mental health education courses are the main way for college students to carry out mental health education for college students and an important means to achieve high-quality talent training. In recent years, due to the frequent occurrence of psychological problems among college students, China attaches great importance to the effectiveness of college students' mental health courses and has issued a series of policies and documents to guide the development of mental health courses in colleges and universities. "Special Project on Comprehensively Strengthening and Improving Students' Mental Health Work in the New Era. The Action Plan (2023-2025) proposes ways to strengthen school mental health education to improve the effectiveness of mental health education in colleges and universities. Based on existing research, there are shortcomings in the teaching model of traditional mental health courses, and the teaching effect needs to be improved. From the implementation of mental health courses in Chongqing Polytechnic University of Electronic Technology, it is found that there are indeed some problems with traditional courses： In terms of teaching methods, the teaching method is single. Wang (2015). In terms of course



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content, the integration of course content is insufficient, and the updating of teaching content is slow. Lei (2019). In terms of course format, the practicality of the course needs to be improved. Feng (2015). In terms of curriculum subjects, the interaction between teachers and students in the course is not strong. Given the above problems, to improve the teaching quality and effect, this study chooses to combine blended learning with evidence-based learning to create a more attractive and challenging learning experience. Consider improving the principles, objectives, content, teaching strategies, media and resources, and evaluation of the course.

Blended learning is based on Web technology, combining video, audio and other multimedia technologies, combining traditional teaching methods with information technology means, giving full play to the leading role of teachers and the dominant position of students, and combining process evaluation, result evaluation and other multiple methods, evaluation method, a new teaching method to achieve the best teaching effect (Zhang and Wang,2014). Cui (2022) applied blended learning in college students' mental health education courses and designed a blended learning activity based on "network + classroom + mobile terminal". Research has found that blended teaching mode is superior to traditional teaching mode. Under a blended teaching mode, students' college adaptability in aspects such as environmental identification, academic adaptation, and physical and mental adjustment is significantly improved. Kiviniemi's (2014) research shows that blended learning has a significant effect on optimizing students' skill learning and improving their academic performance when used in student psychology courses.

Ren & Liu (2011) Evidence-based learning is the learning that follows evidence, which is to carefully, accurately and wisely apply the best teaching research basis that can be obtained at present, and at the same time, combining teachers' professional skills and years of teaching experience, considering students' values and wishes, perfectly combining the three, and formulating a teaching plan. Whitehurst (2002) believes that evidence-based learning refers to "the philosophy of using the best evidence for teaching decisions and teaching practices, emphasizing both the measurement and evaluation of teaching decisions and teaching behaviors before, and highlighting Active intervention and improvement in teaching based on evidence. Evidence-based learning aims to break through the shortcomings of experience-led teaching and subjective teaching. From the perspective of evidence, it organically integrates the teacher's subject, teaching objects, teaching processes, etc., and improves the rationality and effectiveness of teachers' teaching decisions and teaching behaviors.

**Research Question**

1. How to construct a mental health education course based on blended learning combined with evidence-based learning for enhancing the mental health quality of college students?

2. How effective is the implementation of the mental health education course based on blended learning combined with evidence-based learning for enhancing the mental health quality of college students?

**Research Objectives**

The objectives of this research were to study the effect of implementing the mental health education course based on blended learning combined with evidence-based learning.

1. To compare the learning achievement about the mental health education before and after implementing the mental health education course.

2. To compare the college students' mental health quality after implementing the mental health education course with the criterion set at 70%.

**Research hypothesis**

The research's hypothesis of statistical testing was as follows.

1. After implementing the mental health education course based on blended learning combined with evidence-based learning, college students' learning achievement is higher than before.

2. After implementing the mental health education course based on blended learning combined with



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evidence-based learning, college students' mental health quality is higher than the criterion set at 70%.

## Literature Review

### 1. Mental health education course

Mental health education for college students is a necessary course that meets the requirements of society and the development of college students themselves. We need to cultivate the correct life values and various good morals of college students at this stage through this course. It helps college students to complete their understanding of society and the meaning of self-worth in life during their time at school, and to build a strong psychological foundation to face difficulties (Ye, 2022). The impact of a mental health education course on students is multifaceted, mainly including the following aspects: One is to help college students form positive cognitive concepts. College is a critical period for the formation of a person's cognitive concepts. During this period, it is easy to form a set of unique views on many things. Mental health courses can change students' bad cognition to a considerable extent and promote the formation of positive cognitive concepts (Deng et al., 2015). The second is to promote intellectual and personality development. A good psychological state can keep the brain in its optimal state, which is conducive to developing intelligence, fully exerting various abilities, and promoting the harmonious development of personality. The third is to improve interpersonal relationships. Through the study of mental health courses, students can also be exposed to and understand the actual scenes in advance, know the psychological activities of others and themselves in advance, and take corresponding coping measures (Li and Tang, 2014). Students with mental health issues are usually more empathetic and able to better understand the feelings of others, thus establishing sincere friendships. The fourth is to prevent psychological disorders. Psychological health education helps students master methods to cope with setbacks and complex social phenomena, prevent and eliminate various factors that contribute to mental illness, and prevent the occurrence and development of mental illness.

### 2. Blended Learning in Mental Health Education

The blended learning defined in this article is a student-centered approach that organically combines the advantages of online and offline teaching activities. The blended learning in college mental health courses fully follows the principle of combining the advantages of blended learning and integrates online teaching. The learning content is unified with offline teaching content, and the theoretical knowledge of online learning lays the theoretical foundation for offline discussion and learning. In practical teaching, relevant knowledge and skills of mental health are practiced to achieve online and offline resource interaction. Give full play to students' subjectivity in offline teaching, and construct a knowledge and skill framework for students through the design of discussion learning sessions and practical activities. The ultimate goal of blended learning reform is to help students develop a positive and healthy psychological state, correct deviant psychology, and achieve overall improvement in mental health quality. The blended learning program consists of three stages: (1) Online theoretical teaching, which builds a theoretical knowledge framework for students. (2) Offline discussion and teaching, unleashing students' subjectivity. (3) Practical teaching promotes the improvement of students' practical psychological skills (Cui, 2022).

### 3. Evidence-Based Learning Approach

The core of the evidence-based learning approach lies in implementing teaching based on evidence, emphasizing the rationalization, scientificity, and visualization of the teaching process. In teaching practice. Yang and Ye (2010) found that evidence-based teaching mainly includes the following five steps: (1) Raising questions and identifying teaching problems from existing teaching difficulties and obstacles. (2) To obtain evidence, that is, to search for relevant evidence around the teaching theme for the questions raised, and to check whether there are relevant teaching manuals, teaching guides, teaching literature, educational databases, etc., that can respond to and answer the questions. (3) To analyze, identify, and evaluate evidence, providing direct and powerful evidence for problem-solving and promoting teaching activities. (4) To apply evidence, which is the powerful evidence obtained through critical analysis, and applied to teaching practice to form the best solution and promote the resolution of teaching problems. (5)



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Effectiveness evaluation, which includes both the evaluation of the application of evidence and the evaluation of the effectiveness of problem-solving. Evidence-based learning is applied to mental health education courses, which refer to mental health education in which teachers integrate the best research evidence with their educational skills when they realize their students' characteristics, culture, and preferences. The evidence-based learning approach used in this study is applied to the practical teaching and process of mental health education.

**4. Mental health education course based on blended learning combined with evidence-based learning**

Based on relevant research results and the characteristics of college students' mental health education courses, this study combines blended learning with evidence-based learning mode for course teaching, and the teaching strategy is divided into four steps:

Step 1: Preclass learning

Preclass learning refers to online theoretical teaching. Online teaching adopts an online learning platform. Teachers upload teaching materials to the learning platform before class and publish corresponding teaching tasks. Students master the theoretical knowledge of mental health education and complete online assignments by completing video learning content and online learning tasks.

Step 2: Classroom interactive learning

Classroom interactive learning refers to offline discussion-based teaching that utilizes students' subjectivity. During the teaching process, teachers mainly teach basic concepts and theories, determine the teaching gradient based on students' online learning status, and promote the connection between online theoretical knowledge and offline discussion content. Then, according to the course, students are flexibly arranged to engage in group discussions, collaborative exploration, case analysis, keynote speeches, and experience sharing.

Step 3: Practical Teaching

Evidence-based practice teaching provides group counseling for students' mental health. By identifying problems, seeking the best evidence and solutions to guide and encourage students to intervene in psychological issues, creating simulated real-life situations and activity projects in teaching, and promoting students to experience cognitive, emotional, and emotional changes during activities. Create specific scenarios and atmospheres, such as meditation training, situational roles, group training, etc.

Step 4: Evaluation

Evaluate the learning achievement of mental health education courses and students' mental health qualities through blended learning and evidence-based learning methods, using test papers and psychological self-assessment scales.

**5. Mental health quality**

This article argues that mental health quality refers to the fact that people's mental activity process is in a good and normal state, with normal intelligence, correct cognition, appropriate emotional expression, positive behavior and attitude, and good adaptability to the surrounding environment. The following six aspects are all included in the composition of college students' mental health quality:

1) Normal intelligence refers to an individual having normal thinking and learning abilities, being able to understand objective things, and applying knowledge to solve practical problems (Wang and Zhang,1992; Peterson & Seligman, 2004).

2) Understanding and accepting oneself refers to having a correct understanding of oneself, accepting one's strengths and weaknesses, developing strengths, making up for weaknesses, and becoming more outstanding (Wang and Zhang, 1992; Huang, 2020).

3) Strong emotional management and regulation ability refers to the ability to perceive one's own emotions, have moderate emotional responses, and be able to control and regulate one's emotions in appropriate ways. The process of emotional management and regulation can help us better understand ourselves and others, improve personal life and career achievements, and better understand and cope with the challenges and pressures we face (Wang and Zhang,1992; Peterson & Seligman, 2004).



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4) Good interpersonal relationships refer to the positive psychological relationships formed between individuals during their interactions. Good interpersonal relationships have intimacy, harmony, and coordination, and include cognitive, emotional, and behavioral components. Interpersonal relationships include family relationships, friendship relationships, alumni relationships, teacher-student relationships, romantic relationships, and relationships between colleagues, leaders, and subordinates (Huang,2020).

. 5) Good adaptability refers to being able to maintain good contact and communication with the environment with an open mindset, having resilience, tenacious will, decisive spirit, strong self-control, competitive consciousness, and a tolerant attitude and broad-mindedness towards people and things (Xiao,2016).

6) Complete personality refers to four aspects of personality: uniqueness, stability, integration, and functionality. A complete personality expression is characterized by no obvious defects or deviations, and a clear self-awareness; Taking a proactive outlook on life as the core of personality and effectively controlling one's psychological behaviour; Having relatively complete and unified psychological characteristics (Wang and Zhang,1992; Xiao,2016).

**6. Students' learning achievement**

Learning achievement is generally considered the attainment of knowledge, skills, and competencies through formal education, reflected in grades, test scores, and overall academic performance (Schunk, 1989). Course grade assessment focuses on testing students' autonomous learning ability, innovation ability, and other scientific qualities and social skills. This grade assessment system is not only an evaluation of learning outcomes, but also pays more attention to the evaluation of the learning process. Through reasonable and fair course grade assessment, students' ability to combine theoretical knowledge with practice can be strengthened, and they can achieve a deeper understanding of knowledge, cultivate autonomous learning ability, stimulate learning enthusiasm, and improve students' overall quality (Wu et al,2019). Students' learning achievement is the comprehensive performance achieved by learners through learning and participating in educational activities. It usually represents learners' mastery of course content, critical thinking ability, problem-solving ability, and academic achievements. Learning performance can be measured through exams, assignments, classroom participation, and other evaluation methods. It not only reflects the knowledge level of learners in specific subject areas, but also reflects their learning motivation, learning strategies, and learning attitudes. Learning performance has a significant impact on students' academic development, career development, and further educational opportunities. Therefore, educational institutions, educators, and students themselves attach great importance to the evaluation and improvement of academic performance. Students' learning achievement mainly includes cognitive, understanding, application, practice, and emotional aspects. The evaluation methods for students' learning performance vary depending on factors such as subject area, educational system, and grade. The main content of student performance is evaluated from the following four aspects: memory, understanding, application, and analysis. Because the fifth and sixth goals in Bloom's cognitive domain, evaluate and create, are difficult for students, they are not adopted.

In this research, the independent variable is the implementation of the Mental Health Education Course based on blended learning combined with evidence-based learning, and the dependent variables are students' learning achievement and students' mental health quality.

**Conceptual Framework**



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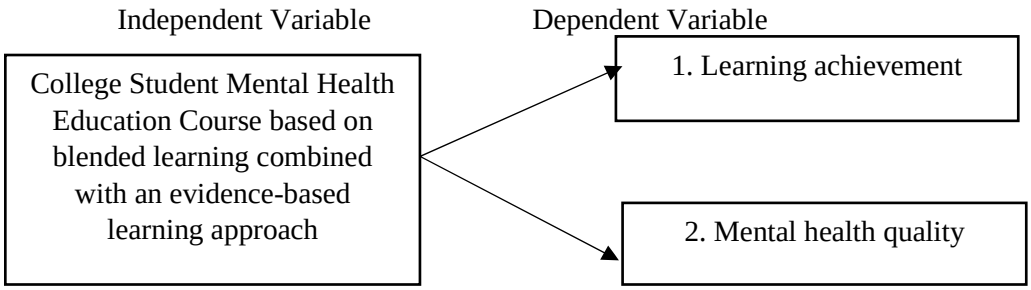


**Figure 1** The Independent Variable and Dependent Variables

## Research Methodology

**Population and Samples:** The population was 200 first-year students (6 classes) in Chongqing Polytechnic University of Electronic Technology. The sample was 30 first-year students (1 class) derived from cluster random sampling.

**Research Instruments:** Research instruments are the tools for researching to collect data. The research instruments that were used in this study were:

1. Experimental instruments

1.1 Mental Health Education Course based on blended learning, combined with evidence-based learning, includes four steps: 1) Preclass learning,2) Interactive learning in class,3) Practical teaching,4) Evaluating. Five experts evaluated the draft course, in 24 items of the course evaluation form, the lowest mean score was ($M$=4.2, $S.D.$=0.84), and the highest mean score was ($M$=4.80, $S.D.$=0.45). It was revealed that the Mental Health Education Course, based on blended learning combined with evidence-based learning, was at a high level ($M$=4.53, $S.D.$=0.63).

1.2 Lesson plans: Five experts evaluated the eight lesson plans, in the 14 items of the lesson plan, one evaluation form, the lowest mean score was ($M$=4.10, $S.D.$=0.45), and the highest mean score was ($M$=4.63, $S.D.$=0.51). It was revealed that lesson plan one was high level ($M$=4.31, $S.D.$=0.49).

2. Instruments for collecting data

2.1 Student's learning achievement test: The test had a total of 40 items. The index of Item Objective Congruence (IOC) value of 40 items in the test was 0.60 at the lowest and 1.00 at the highest. The result of analyzing the IOC index showed that all the items were appropriate and could be used in the mathematical reasoning ability test. Analyze the item of the mathematical reasoning ability test and find out that the item Reliability (0.746) is more than 0.70. This showed that the quality of the student's learning achievement test was good. (Cronbach,1951)

2.2 Students' Mental Health Quality Self-evaluation: The Mental Health Quality Self-evaluation is provided to 5 experts for content validity check and suggestions. The result of analyzing the IOC index (0.60-1.00) showed that all test items were appropriate and could be used in the test. The Cronbach's Alpha coefficient of the reliability of the student satisfaction questionnaire is 0.732, which is greater than 0.70. Therefore, the reliability of the Students' Mental Health Quality Self-evaluation meets the requirements (Cronbach, 1951)

**Data Collection:** The procedures of data collection were as follows:

1. The experimental group learned an excellent mental health education course based on Blended Learning combined with Evidence-based Learning.
2. Before learning, Pre-test the students by using a learning achievement test.
3. After completing the instructions, the students in the experimental group finished the mental health education course test paper on learning achievement.
4. After completing the instructions, the students in the experimental group finished the students' scale for self-evaluation of students' mental health quality of the mental health education course.



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**Data Analysis:** In this study, quantitative data were analyzed by using Mean, Standard deviation, and t-test for dependent samples.

1. Compare students' learning achievement before and after implementing mental health education courses by using a t-test for dependent samples.

2. Compare the evaluation data of college students' mental health quality after implementing mental health education courses with the standard set at 70% by using a t-test for one sample.

## Results

According to the research objectives, the results were as follows:

1. The result of the comparison of students' learning achievement before and after learning through the Mental Health Education Course

When analyzing the results of the comparison of students' learning achievement before and after implementing the Mental Health Education Course, the researcher mainly analyzed the following data: Comparison of the test paper score before and after implementing the Mental Health Education Course.

A paired sample t-test was conducted on the pre-test scores and post-test scores of the 30 students' learning achievement about the mental health quality test paper. The results are as follows.

**Table 1** Result of a paired sample of learning achievement about mental health quality test paper scores

| Group | n | Full score | Pre-test scores | | Post-test scores | | t | p |
|---|---|---|---|---|---|---|---|---|
| | | | *M* | *S.D.* | *M* | *S.D.* | | |
| Experimental group | 30 | 40 | 24.57 | 7.05 | 34.17 | 3.57 | -13.19** | .001 |

**p < .01

As presented in Table 11, the mean scores of the pre-test of students' earning achievement were (*M*=24.57, *S.D.*=7.05), and the post-test of students' earning achievement was (M=34.17, *S.D.*=3.57).

Moreover, it aimed to examine the different scores of before-and-after learning through the mental health education course to enhance Mental Health Quality. The findings of this table revealed that after learning through the mental health education course, the students' Mental Health Quality was higher than before.05 level of statistical significance *(t=-13.19, p<.05)*. The average scores of the study developed increasingly higher than the pretest.

2. The findings of a comparison of students' Mental Health Quality after learning through the mental health education course

The result of the comparison of students' Mental Health Quality after implementing the mental health education course based on blended learning combined with evidence-based learning.

The researcher used the Students' Mental Health Quality Self-evaluation form to survey the first-year students in Chongqing Polytechnic University of Electronic Technology, and randomly selected 30 students' data for analysis.

**Table 2** Mean score and standard deviation of students' Mental Health Quality level after learning through a mental health education course based on blended learning combined with evidence-based learning

| Question number of Mental Health Quality | | M | S.D. | Mental Health Quality Level |
|---|---|---|---|---|
| **Section** | **Components** | | | |
| Part 1: Normal intelligence | 1. I have a high enthusiasm for learning. | 4.23 | 0.90 | High level |
| | 2. My attention can remain focused while studying. | 4.37 | 0.67 | High level |
| | 3. I have a clear study plan and can persevere. | 4.47 | 0.57 | High level |



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| Section | Question number of Mental Health Quality Components | M | S.D. | Mental Health Quality Level |
|---|---|---|---|---|
| | 4. I am good at trying to learn new knowledge and skills. | 4.57 | 0.57 | Very high level |
| Part 2: Understanding and accepting oneself | 5. I am very interested in mental health knowledge. | 4.53 | 0.68 | Very high level |
| | 6. I am satisfied with my appearance and figure. | 4.23 | 0.81 | High level |
| | 7. I am an optimistic person. | 4.27 | 0.87 | High level |
| | 8. I know my personality traits. | 4.30 | 0.63 | High level |
| | 9. I have a clear understanding of my career inclination. | 4.20 | 0.66 | High level |
| Part 3: Strong emotional management and regulation ability | 10. Your emotional issues will not affect your studies, social interactions, or daily life | 4.30 | 0.65 | High level |
| | 11. I can control my emotions reasonably.. | 4.43 | 0.63 | High level |
| | 12. I often express my emotions. | 4.13 | 0.68 | High level |
| | 13. When encountering unexpected situations, I am not prone to panic and anxiety. | 4.23 | 0.57 | High level |
| | 14. When I'm sad, I keep myself busy and don't want to worry. | 4.40 | 0.77 | High level |
| | 15. When I lack confidence in my learning, I will look for my strengths and approach problems from a positive perspective. | 4.63 | 0.56 | Very high level |
| Part 4: Good Interpersonal relationships | 16. I don't feel nervous and anxious in public places. | 4.33 | 0.66 | High level |
| | 17. When I am with friends, I don't feel lonely or lost. | 4.27 | 0.83 | High level |
| | 18. I can accept everyone's different hobbies and habits when interacting with classmates. | 4.40 | 0.89 | High level |
| | 19. I maintain a close and good relationship with my family. | 4.47 | 0.68 | High level |
| | 20. In a romantic relationship, I hope both parties can learn from each other and progress together. | 4.77 | 0.43 | Very high level |
| | 21. I can handle the relationship between love and academic life well. | 4.03 | 0.77 | High level |
| Part 5: Good adaptability | 22. After entering a new environment, I can quickly adjust myself and integrate into it. | 4.43 | 0.68 | High level |
| | 23. Changes in the environment can not cause me insomnia. | 4.40 | 0.81 | High level |
| | 24. I can seamlessly integrate into the | 4.43 | 0.63 | High level |



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| Question number of Mental Health Quality | | M | S.D. | Mental Health Quality Level |
|---|---|---|---|---|
| **Section** | **Components** | | | |
| | dormitory and class group. | | | |
| | 25. I can accept everyone's different hobbies and habits | 4.17 | 0.87 | High level |
| Part 6: Complete personality | 26. When encountering setbacks, I can calmly think and approach them with composure. | 4.33 | 0.71 | High level |
| | 27. Life only comes once, and one should live it meaningfully. | 4.77 | 0.43 | Very high level |
| | 28. I don't often feel cowardice, inferiority complex, anxiety, and so on | 4.77 | 0.50 | Very high level |
| | 29. A person's life is destined to go through some hardships. | 4.80 | 0.41 | Very high level |
| | 30. I am dissatisfied with my past self and hope to change. | 4.70 | 0.47 | Very high level |
| | **Total/Overall** | 4.42 | 0.67 | High level |

The result of Table 2 showed that the students' Mental Health Quality level about the mental health education course based on blended learning combined with evidence-based learning was high (*M*=4.42, *S.D.*=0.67). In the 30 items of Mental Health Quality Self-evaluation form, the lowest mean score was (*M*= 4.03, *S.D.*=0.77), and the highest mean score was (*M*=4.80, *S.D.*=0.41).

3. The finding of comparison of students' Mental Health Quality after learning through the mental health education course, with the criteria set at 70 percent.

The result of the comparison of students' Mental Health Quality after implementing the mental health education course based on blended learning combined with evidence-based learning, with the criteria set at 70 percent. The table below shows descriptive statistics and t-test as analyzed by the statistical package program. This table aims to answer the research objective of whether the implementation of a mental health education course based on blended learning combined with evidence-based learning can improve students' Mental Health Quality.

**Table 3** The result of comparing the different scores of students' Mental Health Quality after learning through a mental health education course based on blended learning combined with evidence-based learning, set at 70 percent.

| Group | n | Full score | Criteria | *M* | *S.D.* | t | p |
|---|---|---|---|---|---|---|---|
| Experimental group | 30 | 150 | 70% （105） | 132.5 | 5.55 | 130.75** | 0.001 |

**p＜.01

As presented in Table 3, the mean scores of students' Mental Health Quality after learning through a mental health education course based on blended learning combined with evidence-based learning was 132.5, which was statistically higher than the criterion of 70% at.05 level of statistical significance (t=130.75, p=0.00<.05).

It can be seen that the students' Mental Health Quality after learning through the mental health education course based on blended learning, combined with evidence-based learning, is higher than 70%.

## Conclusion



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International Journal of Sociologies and Anthropologies Science Reviews
Volume 5 Issue 4: July-August 2025: ISSN 2985-2730
Website: https://so07.tci-thaijo.org/index.php/IJSASR/index

Through the comparative analysis of the results of the pretest and post-test of the first-year students using the mental health education course based on blended learning combined with evidence-based learning, the intervention of the mental health education course based on blended learning combined with evidence-based learning was evaluated. The conclusion was as follows:

After the implementation of a mental health education course based on blended learning combined with evidence-based learning, the Mental Health Quality of students majoring in economics and Management of first-year students at Chongqing Polytechnic University of Electronic Technology had been significantly improved.

1. The students' learning achievement data analysis about pre-test and post-test showed that the mean score of post-test data was 9.6 points higher than that of pre-test data. When the confidence level was.05, and the t-test value Sig. = 0.001<.05 (The mean of pre-test was 24.57, the mean of post-test was 34.17).

2. The students' Mental Health Quality level about the mental health education course based on blended learning combined with evidence-based learning was high (*M*=4.42, *S.D.*=0.67). In the 30 items of Mental Health Quality Self-evaluation form, the lowest mean score was (*M*= 4.03, *S.D.*=0.77), and the highest mean score was (*M*=4.80, *S.D.*=0.41)

3. The students' Mental Health Quality after learning through the mental health education course based on blended learning combined with evidence-based learning is higher than 70%. The mean scores of students' Mental Health Quality after learning through the mental health education course based on blended learning combined with evidence-based learning were 132.5, which was statistically higher than the criterion of 70% at.05 level of statistical significance (t=130.75, p=0.001<.05).

This study is based on the use of blended learning combined with evidence-based learning in mental health education courses, and evaluates the effect of mental health course teaching on improving students' mental health quality using SPSS software. The results indicate that the psychological health education curriculum based on blended learning combined with evidence-based learning has a good promoting effect on improving students' psychological health quality. After implementing a psychological health education curriculum based on blended learning combined with evidence-based learning, students' levels of self-awareness, learning psychology, emotional management, interpersonal relationships, coping with stress and setbacks, gratitude for life, subjective well-being, and adaptability have all improved to varying degrees.

**Discussion**

The following points, based on the research results, were discussed:

The course of college students' mental health education, which combines hybrid learning with evidence-based learning, has constructed a new concept and practice framework. The results show that the course has improved the effectiveness of practical teaching, expanded the breadth and depth of learning, enhanced student participation, significantly improved students' test scores, and improved their mental health.

1. According to the following explanation, the four steps of the teaching process based on hybrid learning combined with evidence-based learning can improve students' mental health quality.

The first step: Online theoretical teaching to stimulate students' interest and participation. Guide students to think in the context of special teaching, present real psychological cases through video learning, online learning tasks, and online discussions to stimulate students' learning interest and participation. Fu and Liu (2020) studied that online teaching has the characteristics of immediacy, interactivity, and transcendence of time and space, which can effectively stimulate students' interest in learning. By arranging online learning on their own, students will, to some extent, improve their positive psychological qualities such as self-efficacy and self-control.

The second step: Offline seminar teaching to give full play to students' subjectivity. In offline seminar classroom teaching, the teaching concept of student-centered, leading teaching, active interaction, and combining theory with practice is implemented. The discussion content interacts with online knowledge to change the disadvantages of traditional offline teaching, knowledge fragmentation, and low-level thinking. Students give full play to their subjectivity in the process of participating in group discussions, cooperative



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exploration, case analysis, experience sharing, etc., give full play to student-student interaction and teacher-student interaction, and form meaningful knowledge construction in teaching activities and communication interactions (Cui, 2022).

The third step: Practical teaching to promote the improvement of students' practical psychological skills. Adding evidence-based learning practice teaching to the blended learning program is a necessary means to improve students' mental health quality in a step-by-step manner, allowing students to find their psychological problems in practical classes, and under the guidance of teachers, find and application the best evidence to intervene in psychological problems, thereby improving their ability and skills to solve psychological problems (Cui, 2018).

The fourth step: Evaluation. Evaluation is a process of comprehensive evaluation of students' learning process, completed homework, and practical ability. Process evaluation must be included in the evaluation system of college students' mental health education courses (Zhao et al.,2019).Including students' online learning situation, classroom participation, discussion performance, cooperation ability, communication skills, etc. At the same time, it focuses on using psychological tests, behavioral observations, interviews, self-evaluation, and others' evaluations to dynamically evaluate students' mental health quality. It can deeply understand students' psychological characteristics and potential needs, dynamically adjust teaching content and methods, and promote the solution of students' psychological problems.

2. The mental health course based on the health belief model (HBM) has a positive effect on improving students' mental health quality. The mental health education course through blended learning and evidence-based learning has built a health belief model (Zeng et al.,2024) framework for students, which is closely related to the improvement of students' mental health. The course helps students recognize mental health problems and perceive threats. Including an understanding of common mental health problems, such as depression and anxiety, to increase their awareness of mental health problems. The course promotes students to adopt positive psychological adjustment behaviors. Perceived benefits: Students understand the basics of mental health problems, including identifying symptoms, understanding causes, and intervention methods. Understand the benefits of taking positive mental health behaviors, such as seeking professional help and participating in mental health education courses, which can relieve stress, improve academic performance, improve interpersonal relationships, and improve quality of life. Make students believe that taking these behaviors can effectively improve their mental health. Help students overcome perceived barriers. The course helps students identify and overcome barriers that may be encountered in the process of taking psychological adjustment behaviors, such as time scheduling difficulties, misunderstandings about psychological counseling, lack of social support, etc., and obtain solutions through evidence-based learning, encouraging students to actively face and overcome these barriers. The course enhances students' psychological adjustment ability and improves self-efficacy: through practical teaching links, it helps students master effective psychological adjustment skills and methods, such as emotion management, cognitive reconstruction, relaxation training, role-playing, etc. At the same time, it gives students positive feedback and encouragement, allowing them to continuously experience success in practice, thereby enhancing their sense of self-efficacy and belief that they can maintain and improve their mental health. At the same time, various prompting factors are set up in the school environment, such as mental health propaganda posters, regular mental health lectures, and the promotion of psychological counseling services etc., to remind students to pay attention to their mental health and provide them with ways to obtain help and support.

3. The blended learning model based on the Technology Acceptance Model (TAM) improves student participation. The Technology Acceptance Model (Pei,2023) provides an important theoretical framework for understanding how users accept and use new technologies. In the mental health education course, the introduction of the blended learning model provides a new opportunity to improve student engagement. Blended learning combines the advantages of traditional face-to-face teaching and online learning, and can be flexibly adjusted according to students' different needs and learning styles, thereby improving the effectiveness and interest of learning. First, from the perspective of the technology acceptance model,



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students' acceptance of blended learning is mainly affected by perceived ease of use and perceived usefulness. If students can easily use the online learning platform and feel that this learning method can help them better understand and apply mental health knowledge, their engagement will naturally increase. Secondly, the blended learning model can provide a variety of learning resources and interactive methods, such as video lectures, online discussions, case analysis, etc., which can stimulate students' interest in learning. In addition, online discussions and interactive sessions can promote communication between students and enhance the social nature of learning, which is particularly important for mental health education, because mental health problems often need to be better understood and solved through communication and interaction. Furthermore, blended learning can also use data analysis technology to monitor students' learning progress and participation in real time, and provide targeted help and support, thereby further improving students' participation. Finally, the goal of mental health education is not only to impart knowledge, but also to cultivate students' psychological quality and coping ability. The blended learning model can improve students' psychological literacy by providing rich mental health education resources and encouraging students to reflect on themselves and express their emotions. When students feel the relevance and practicality of the learning content, their participation and enthusiasm will be significantly improved.

4. Course Limitations. This study has a small sample size problem; the sample size of the course participants in the study is insufficient, and the sample has selection bias, which may lead to low statistical power and difficulty in finding significant effects. The results cannot be generalized to a wider group, and the reliability of the conclusions is limited. It is recommended to expand the sample range, such as cross-regional cooperation, and jointly carry out courses with multiple schools, educational institutions, or communities to cover student groups from different regions and cultural backgrounds. Stratified sampling: Stratified sampling according to factors such as age, gender, and family background to ensure the representativeness of the results. This study lacks a control group. The study only uses a single-group pretest and post-test design, and does not set up a control group participating in traditional teaching. It is difficult to distinguish the relationship between the course effect and natural changes or other external factors, such as the passage of time and social events. It is impossible to determine whether the course is effective, and the intervention effect may be overestimated or underestimated. It is recommended to use a randomized controlled trial (RCT) design to randomly assign participants to the intervention group and the control group. If random grouping is not possible, quasi-experimental design (such as matched control group) or statistical control method (such as covariate analysis) can be used. In addition, the period of this study is insufficient. The course effect may be short-term, and the long-term impact has not been tracked. It is recommended to extend the follow-up time and combine long-term tracking data to evaluate sustainability.

**Recommendations**

1. Changing variables to study the teaching effect of college students' mental health education course. To further study the teaching effect of college students' mental health education courses, we can change different variables (independent variables) and observe their impact on the teaching effect (dependent variable). For example, study the impact of college students' mental health education courses on students' mental health knowledge test scores, psychological quality, behavioral changes, academic impact and course satisfaction under the modular teaching mode of traditional lectures vs interactive teaching (such as group discussion, actual case analysis), experiential teaching (such as psychological drama, role-playing), online courses (such as MOOC, live broadcast) vs offline courses, peer tutoring (student assistant participation).

2. Future studies should include a control group for a more robust comparison of learning effectiveness. In the study of mental health education courses, many irrelevant variables may affect the research results, such as time factors, natural growth, changes in social environment, etc. By setting up a control group, the influence of these interfering factors can be separated. The setting of a control group is an important part of scientific research methods, which enables the research to have better internal and



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external validity. For example, when conducting mental health education course research in multiple schools, setting up a control group can exclude the influence of factors such as the school's specific environment, so that the research results can better represent the effect of the course in general and enhance the scientificity and credibility of the research.

3. The impact of this study on China's university mental health policy is mainly reflected in the following aspects) Promote the transformation of policy goals from "popularization" to "precision". Blended learning can expand the coverage of courses through online platforms such as MOOCs and mental health apps, which are suitable for students in different regions and prompt policies to emphasize educational equity. Evidence-based learning requires that course design be based on empirical research, promote policies from "experience-oriented" to "data-driven", and emphasize the scientificity and effectiveness of mental health education.2) Promote the integration of course models and technology. The Ministry of Education may issue documents such as "Digital Standards for College Students' Mental Health Education" and "Guidelines for Evidence-Based Psychological Intervention" to encourage colleges and universities to build digital platforms for mental health and support the application of hybrid learning tools such as AI psychological counseling and VR psychological training. 3) Promote the transformation of teachers' roles and the improvement of professional capabilities. Mental health teachers need to master online teaching techniques such as live streaming, data analysis, and evidence-based practice capabilities, which will prompt policies to strengthen teacher training and even include relevant skills in college teacher certification.

## References

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16,* 297–334. https://doi.org/10.1007/BF02310555

Cui, X.T. (2022). Exploring the Course Effectiveness of Blended Teaching in College Mental Health Courses. Master's Thesis, Dalian University of Technology

Cui, Y.X. (2018). The current situation, problems and prospects of evidence-based teaching research, *Journal of HaiNan Normal University (Social Sciences)*, 3l, 181. https://doi.org/10.16061/j.cnki.cn46-1076/c.2018.01.014

Deng, J.C., Li, H.L., Deng, X.M., Cheng, L.H.,&Liu, W.G. (2015). Analysis of the role of mental health education courses in cultivating college students' positive psychological qualities. *Asia-Pacific Education, 4,* 227- 291.

Feng, G.M. (2015). Research on the Problems and Countermeasures of College Students' Mental Health Education Curriculum. *Chinese Journal of Education, 2,* 95-96

Fu, Y.N., & Liu, Q.Q. (2020). Exploration on the application of hybrid teaching model in mental health education courses from the perspective of positive psychology, *Psychological Health and Career Development.* 9, 1-10.

Huang, X. T. (2000). Psychological Health and Counseling for College Students. Beijing: Higher Education Press.

Kiviniemi, M.T. (2014). Effects of a blended learning approach on student outcomes in a graduate-level public health course. *BMC Med Educ*. 47, 10-22.

Lei, Q.L. (2019). Analysis of the current situation and problems in the implementation of mental health education courses in universities. Master's thesis, Central South University for Nationalities

Li, H.L., &Tang, W.H. (2014). Research on the role of mental health education courses in cultivating positive psychological qualities of college students. Master's degree thesis, Guilin: Guangxi Normal University.

Pei, H.M. (2023). A study on the factors affecting college students' acceptance of the Principles of Marxism course based on the TAM model. *Advances in Psychology, 13 (5),* 1715-1720. https://doi.org/10.12677/AP.2023.135207



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Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification.* Washington, DC: American Psychological Association; New York: Oxford University Press.

Ren, W.P., & Liu, Y. (2011). Promoting evidence-based teaching ideas to improve college English teaching, *China Electric Power Education*, 34, 1-10.

Schunk, D. H. (1989). Self-efficacy and achievement behaviors. *Educational Psychology Review*, 1, 173-208.

The Ministry of Education and 17 other departments jointly issued the "Special Action Plan for Comprehensively Strengthening and Improving Student Mental Health Work in the New Era (2023-2025) "[EB/OL]

Wang, D.F., & Zhang, B.Y. (1992). *College Students' Mental Health and Counseling*. Peking University Press

Wang, Y. (2015). The Problems and Solutions of Psychological Health Education in Chinese Universities. *Education and Career, 14,* 63-65

Whitehurst G. J. (2002). *"Evidence-Based Education (EBE)" [Power Point Presentation].* Presentation at the Student Achievement and School Accountability Conference. Retrieved September 27, 2006, from http://ies.ed.gov/director/doc/2002_10.pdf.

Wu, Z., Luo, S.L., Shi, G., Hou, Q., Liu, C., &Wang, Y.H. (2019). Course grade assessment based on research-based teaching, *Journal of South China Normal University (Natural Science Edition),* 2019, 1000-5463

Xiao, H. S. (2016). Exploration of the Objectives and Tasks of the National Heart Health Project [J]. *Health Education and Health Promotion, 11 (2),* 157-163

Yang, W.D., & Ye, H.S. (2010).Shortening the distance between educational theory and practice: A perspective based on evidence-based pedagogy, *Educational Research and Experiment*, 3, 1-10.

Ye, J. (2022). The role of mental health education courses in cultivating positive psychological qualities of college students. *Advances in Psychology, 12 (9),* 3192-3196.

Zeng, W., Yao, D.W., Gong, X., Yu, R.Y., & Chen, X. (2024) The impact of health science short video attributes on college students' proactive health behavior, *New Media Research*, https://doi.org/10.16604/j.cnki.issn2096-0360.2024.21.008

Zhang, Q.L., &Wang, A.C. (2014). Research on a new hybrid teaching model based on "flipped classroom". *Modern Educational Technology,* 24 (4), 27-32.

Zhao, Y., Z, G.S., & Shi, Y.J. (2019) Application of mobile interactive teaching in college mental health education courses, *Education Modernization,* 90, 1-10. https://doi.org/10.16541/j.cnki.2095-8420.2019.90.138



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