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# MENTAL HEALTH EDUCATION FOR COLLEGE STUDENTS BASED ON ONLINE VIDEO TECHNOLOGY

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## Abstract

*The proliferation of the Internet has brought numerous opportunities to improve the mental health education of college students. This paper aims to optimize the mental health education of college students with the aid of online video technology. Firstly, the defects of traditional teaching mode of mental health education were summed up through questionnaire survey and case analysis. Then, the author designed an interactive teaching mode based on the open-source learning platform Moodle. The teaching mode was implemented in mental health education and the implementation results were evaluated. The research shows that the traditional teaching mode of mental health education has several defects, namely, outdated textbooks, impractical teaching design, and lack of independence; the Moodle-based teaching mode can effectively promote the interaction between learners, teachers and teaching contents. The research findings provide a reference for improving the mental health of college students.*

**Key words:** Online Video Technology, Moodle, College Students, Mental Health Education, Teaching Mode.

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## INTRODUCTION

In recent years, the rapid development of Online Video Technology and network technology has brought new opportunities to mental health education of college students. Interaction is very important in mental health education. It's always the focus of research in the education sector on how to realize the interactive experience of college students through online video technology and network technology

Online video technology makes up for the disadvantages of the traditional teaching mode such as the tediousness of teaching content, single form, and limited time and space. It can effectively promote the interaction between students, teachers and teaching content, thereby improving teaching efficiency (Rosen,

Mulsant, Kollar et al., 2002). Moodle is a free, open source teaching platform that provides a good interactive environment and also supports a large number of teaching resources (Bannink, Joosten-van Zwanenburg, van de Looij-Jansen et al., 2012). At present, domestic research on Moodle platform mainly focuses on theoretical research, technology development, curriculum management and teaching practice. There are also some studies on interactive behaviour and interactive teaching evaluation in asynchronous teaching based on Moodle platform (Marsh, Mitchell, & Adamczyk, 2010). However, the research results on interactive teaching of mental health education are very limited. Thus, this paper attempts to study the mental health education method of college students based on online video technology by taking the Moodle as the support platform for online teaching.

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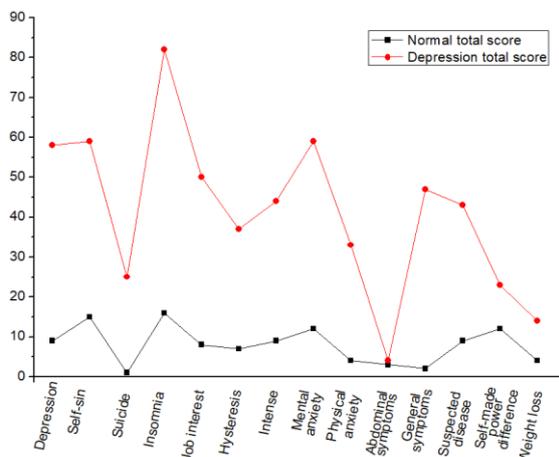
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## STATUS SURVEY ON COLLEGE STUDENTS' MENTAL HEALTH EDUCATION

### Status analysis of college students' mental health education

In order to understand the current status of the mental health education in colleges and universities, this paper selected 237 second-year students from a university in Hangzhou, and used Carroll Rating Scale (CRS) for Depression (Cranford, Eisenberg, & Serras, 2009). A total of 228 valid questionnaires were retrieved, with an effective rate of 96.2%. The 52 items in the CRS were combined to obtain 14 factors such as depression and self-sin etc. Through data analysis, it's found that among the 228 college students surveyed, 75 students were in normal mental health, only accounting for 32.9% of the total; 153 were suffered with psychological depression tendency, accounting for 67.1%. Figure 1 shows the score of each factor in the CRS questionnaire.

Figure 1. CRS questionnaire scores of various factors



It can be seen from the figure above that the insomnia scored the highest among the depressed students, indicating that the problem of insomnia is common among college students, followed by self-sin and mental anxiety, which is usually manifested as restlessness, difficulty in concentration, emotional instability, irritability, etc. In the long run, this will seriously affect the physical and mental development of college students.

### Deficiencies in the traditional teaching of mental health courses

At present, there are still certain problems in the teaching of traditional mental health courses for college students in China as follows:

#### *The textbook is not updated timely*

Usually textbooks should have a certain period of use. However, in the current mental health education, the theories in textbooks are relatively old, the cases are not updated in time, and they aren't combined with the development of society and the actual situation of students, making it impossible to keep pace with the times.

#### *Teaching design is out of touch with reality*

The design of mental health course only focuses on the teaching content of the course and the theoretical system of psychology, but ignoring the actual mental health level and needs of students. Therefore, students usually feel bored about the course content.

#### *Teaching content of mental health education is attached to other education*

Currently, some colleges and universities still haven't opened a separate mental health course, but they've attached the related content to moral education and subject education. Teachers also believe that mental health education means the ideological work of students, and mainly adopt the traditional teaching mode, which lacks in interestingness and interactivity.

### Advantage analysis of online teaching for mental health courses

Compared with the traditional teaching mode, online teaching of mental health has the following advantages:

#### *Richness*

Online teaching can display the teaching content to students in various forms such as sound and image, which can create a relaxed and pleasant teaching scene to attract students' attention, and make the classroom become lively and interesting, thereby improving teaching efficiency.

#### *Convenient exchange between teachers and students*

At present, the Internet is the main form of communication for everyone. Online teaching breaks the time and space restrictions of traditional teaching and avoids the

embarrassment of face-to-face communication so that students and teachers can communicate in real time at any place outside the classroom, and also express their opinions freely.

*Wide coverage of audience*

Online teaching can link many excellent teachers and mental health education resources. One teacher can communicate with many students simultaneously. Students can also learn the information they need through online platforms such as forums.

**DESIGN AND IMPLEMENTATION OF INTERACTIVE TEACHING MODE FOR COLLEGE STUDENTS' MENTAL HEALTH EDUCATION BASED ON MOODLE PLATFORM**

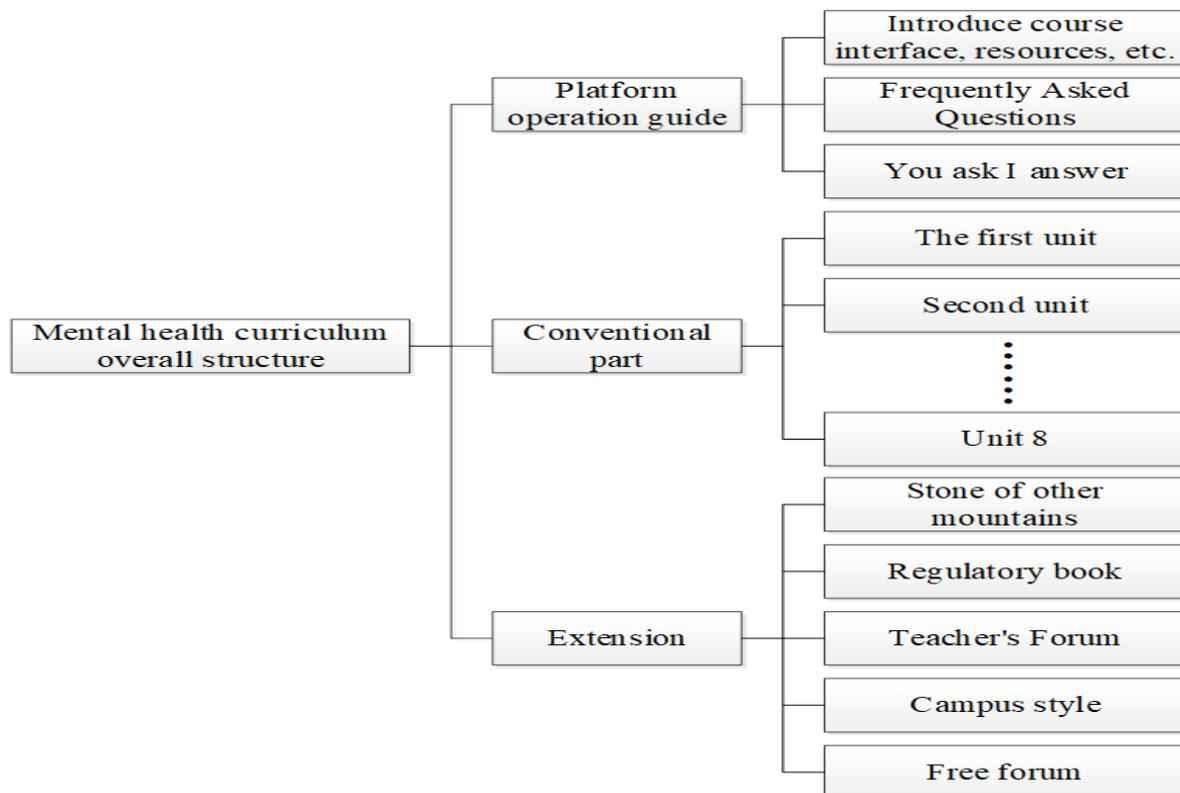
**Design of interactive teaching mode for college students' mental health education based on Moodle platform**

*Introduction to the Moodle platform*

The Moodle platform is an open source web course management system with powerful

features, good compatibility, simple interface, and easy operation, which can meet the vast majority of teachers' online teaching needs (Mailey, Wójcicki, Motl et al., 2010). The system management function of the Moodle platform enables dynamic management of each module, and the system administrator designs the role (Fletcher, Hogan, Fallon et al., 2018). The online teaching function can create and modify courses, display course content, and support learning record tracking, and grouping function and multiple evaluation mechanisms. It also sets usage rights for administrators, teachers, and students, allowing the teacher-student, and student-student to work together and think together, and emphasizing the student-centeredness (Kelleher, Ewert, Yastrubetskaya et al, 2000), which can realize the interactive learning between learners and teachers, and teaching contents. Therefore, this paper selects Moodle platform as the support platform for online teaching of college students' mental health education.

Figure 2. Course module overall structure



### ***The overall design of interactive teaching course***

Figure 2 shows the overall structure of the interactive teaching course module for college students' mental health education based on the Moodle platform.

#### *Interactive teaching process design of college students' mental health education based on Moodle platform*

The specific process of interactive teaching involves the following five stages:

##### (1) Preparation stage

Teachers should understand the basic situation of students in advance. Different from the "heterogeneous grouping" of other disciplines, teachers of mental health course should ensure the members of the group to form complementary advantages based on both the basic situation of students and the principle of voluntary combination. And studies have shown that (Lamont & Brunero, 2013) it's appropriate to have the number of members of the group for 3-6. After grouping and registration of students, the teachers can also create an intra-group platform to increase intra-group communication.

##### (2) Activity-guiding stage

The teachers should carry out the course design according to the syllabus, teaching objectives, teaching content and the actual situation of the students. In order to increase the students' learning enthusiasm and improve the teaching effect, the teachers can also inform the students about the relevant points and let them participate in the whole design process (Oravec, 2000).

##### (3) Interaction and cooperation stage

According to the teaching themes, teachers use the Moodle platform to publish teaching videos related to the topic, discussion topics, assignments and other related teaching resources, while the students can use the computer to conduct pre-school learning, and participate in topic discussions; discuss about questions with group members, and draw conclusions; publish them on the platform, absorb opinions and suggestions from other group members and teachers, and make corresponding modification. At this stage, teachers play a guiding and supervising role in the whole process.

##### (4) Conclusion stage

According to the previous exchanges with teachers and other team members, the teams

form the final results, and present them in traditional forms such as oral presentations and classroom presentations in the classroom. They can also record the results as videos uploaded to the platform, or in blogs, forums. At this stage, the teacher still guides as a leader throughout the process.

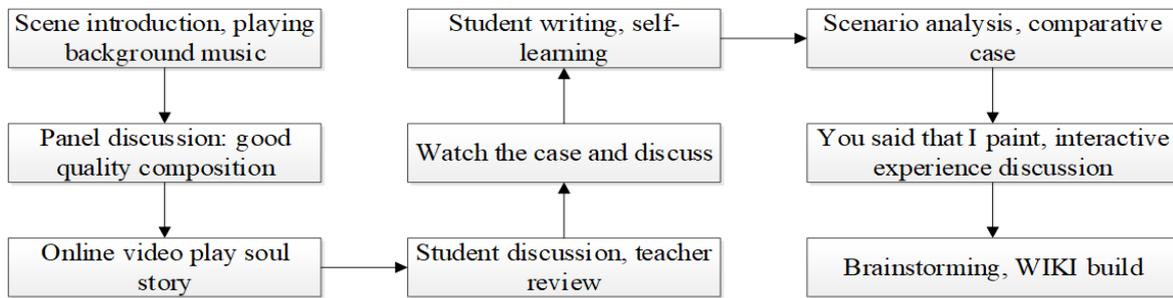
##### (5) Reflection stage

Based on the relevant results uploaded by each group, the teachers carry out the evaluation and guidance, and also organize students to conduct self-evaluation and peer evaluation. Then, for students' problems they provide guidance, and make reflections.

### **Implementation and evaluation of interactive teaching mode for college students' mental health education based on Moodle platform**

By taking one mental health course "Give me a banner" in Grade 2 college students as an example, this paper carries out detailed teaching design for the interactive teaching of college students' mental health education based on Moodle platform. Figure 3 shows the specific implementation process of interactive teaching about "Give me a banner". At the beginning of the course, the teacher played the video song "Mahogany" through the Moodle platform to introduce the course, and organized the students to conduct a group discussion on the good quality composition. After the discussion, the teacher gave some comment, and then broadcast the soul story "Bai Xuemei" using the online video technology of the computer. Next, combining the knowledge they have learned previously, the students performed the case analysis, and published the results to the forum. The teachers re-played the experimental cases for the students, and organized them to discuss. Besides, the process "you said that I paint" fully reflect the interactivity of the course. Each group randomly assigned a representative to describe the prepared pictures in advance, while other students draw according to the description, but they're not allowed to ask questions during the whole process. When they finished the paintings, they would show them, expresses their own ideas, and start a discussion. Thus, students can collaborate through the co-creation environment provided by WIKI on the Moodle platform, which will deepen their understanding of the teaching content.

Figure 3. The specific implementation process of interactive teaching



**Evaluation of interactive teaching mode for college students' mental health education based on Moodle platform**

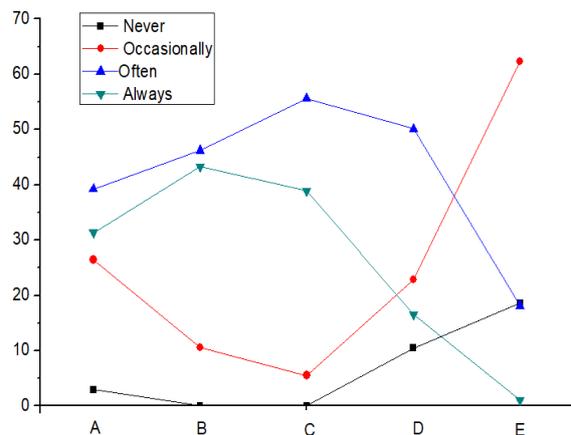
According to the essence of interactive teaching mode (Jauhari, Tiptur, Jauhari et al., 2011), from the perspective of the interaction between learners, teaching content and teachers this paper develops a questionnaire of interactive teaching based on Moodle platform for college students' mental health education to evaluate the interactive teaching mode of mental health education curriculum.

*Statistics on the survey results of interaction between learners and learning content*

Figure 4 shows the survey results of the interaction between the learner and the learning content in five aspects: A refers to various teaching resources and rich content; B means detailed explanation and time schedule for the course; C means online practice and testing provided; D refers to the help of online learning for study; the E is the discussion of the teaching content with a critical view. It can be seen from the figure that 2.96% and 26.44% of the students chose the options "never and occasionally" in terms of the item A, indicating that students should be provided with more abundant online teaching resources in the future; a large proportion of students chose "often" and "always" in terms of B and C, indicating that the students are satisfied with the course format and curriculum arrangement; for the D item, 10.46% and 22.85% chose "never" and "occasionally" respectively, indicating that the students have not learned to improve themselves through communication, and the teachers need to further give guidance through the interaction; in terms of E, 18.57% and 62.27% students selected "never and occasional" respectively, indicating

that the students are too superstitious about the content provided by the teachers and the content of the teaching materials, so they are in lack of critical spirit, and need to be slowly cultivated.

Figure 4. Statistics on the results of interaction between learners and learning content

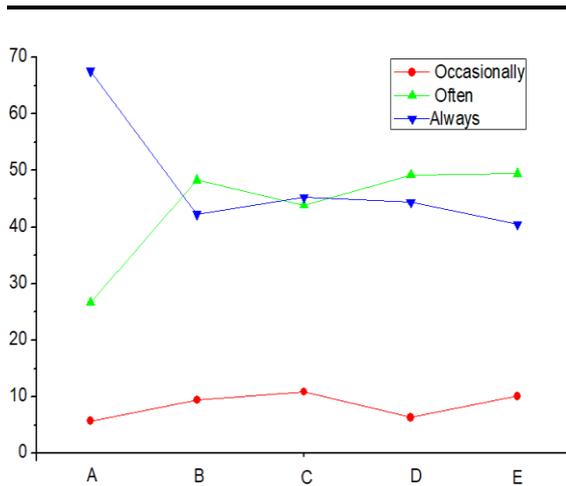


*Statistics on survey results of learners and teachers*

Figure 5 shows the survey results of the interaction between learners and teachers in five aspects, that is, A: the willingness to communicate with the teacher and improve their interest in learning; B: most questions answered by the teacher: C: encouraging and guiding students to participate in online learning discussions by the teachers; D: careful analysis for students' assignments and proposal of additional information and suggestions for improvement: E: allowing teachers to conduct targeted learning guidance and help according to

their individual circumstances. It can be seen that no students chose the option "never", while about 10% of the total number chose "occasionally" in these five aspects, indicating a more satisfactory interaction between learners and teachers.

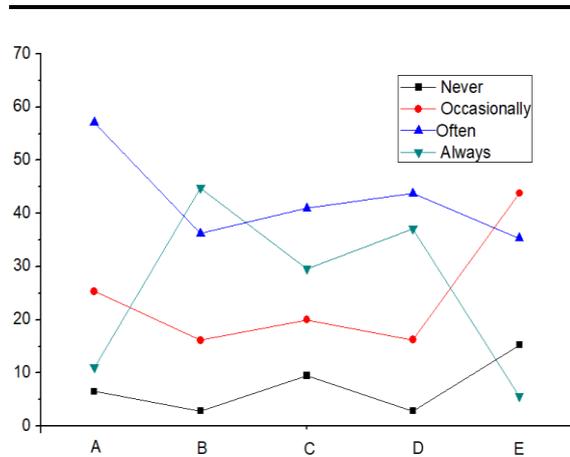
**Figure 5. Survey results of learner-teacher interaction**



*Statistics on survey results of the interaction between learners and learners*

Figure 6 shows the results of the interaction between learners and learners. The item A is whether the learners can learn collaboratively through the Moodle platform; B is whether they can actively express their opinions to others; C is whether to look on the classmates with a critical eye; the D is whether to actively answer the questions raised by the teacher and the classmates; the E is to encourage the themselves to participate in the communication, and their contributions can be recognized by the classmates. It can be seen from the figure that except for the item E, the "often and always" occupied a higher proportion in other aspects, indicating that the students can actively participate in the teaching activities and are satisfied with the interaction between the students; about 60% of the students chose "never and occasionally" in the aspect of B, indicating little mutual help and encouragement among the students, which reminds the course designers to strengthen the guidance of students' emotional communication when designing the course.

**Figure 6. Survey statistics between learners and learners**



## CONCLUSIONS

In view of the current problems with college students' mental health education, this paper attempts to study the related education method based on Online Video Technology. The specific conclusions are as follows:

(1) The survey results of college students' mental health education show that most college students have psychological depression tendency, mainly including insomnia, self-sin and mental anxiety;

(2) Traditional mental health education has the problems: the teaching materials are not updated in time, the teaching design is out of touch with reality, and the teaching content is attached to other education; the online teaching has the advantages of richness, convenient teacher-student exchange, and wide coverage of audiences;

(3) Taking the Moodle as the support platform for online teaching of college students' mental health education, the interactive teaching mode was designed and implemented in detail. The evaluation results showed that this model could effectively promote the interactions between learners, teachers and teaching content.

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