Design of Network Platform for Psychological Sand Table Course Based on Data Mining

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Abstract. With the rapid improvement and wide application of network technology and the maturity of network tools, the network course platform has become a popular direction of teaching research in colleges and universities. The purpose of the psychological sand table online course is to enable students to achieve self-catharsis, release pressure and reflect self-growth through sand table and sand tools. The research purpose of this paper is to design the network platform of psychological sandbox course based on data mining. In the experiment, the sandplay course designed a 12-hour course corresponding to the mental health education course. Taking the students of Class 1 and Class 2 of the psychology education major of Wuyi University in Fujian Province as the research object, a questionnaire survey and an independent sample T test were carried out on the class. Therefore, the group psychological sandplay game course in colleges and universities is carried out, and the evaluation of the implementation effect of the psychological sandplay course network platform is studied in the experiment.

Keywords. Data mining, psychology, sand table course, network platform design

1. Introduction

The psychological sand table online course can be conducted for each learner, and the content can be designed according to the personality of each learner, so that learners can learn the knowledge that suits them most, and it is easier to absorb new knowledge and integrate it into the original knowledge [1]. The psychological sand table online course will provide learners with a communication community. Students and teachers can communicate in near real time, and each learner can participate in the discussion, which makes the communication and discussion of problems more convenient. Effective and thorough.

The series of sand table images presented in the sand table of the psychological sand table online course create a continuous dialogue between the conscious and the unconscious in the depths of the mind of the sand players, as well as the healing process and personality improvement inspired by this. JW Diller believes that scientific ideas always appear in the media, and students need to learn to think critically about the accuracy of these descriptions. Students who received college English writing

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training showed considerable improvement in written communication compared to those who did not [2]. Gorvine BJ's research describes the use of collaborative learning methods in psychostatistics courses and examines the factors that predict students benefiting the most from this method from a learning outcome perspective. Students were surveyed about personal learning preferences, group learning preferences, and group learning anxiety in a format that included extensive group work. Psychological education online courses have been widely used.

2. Research on Design of Network Platform for Psychological Sand Table Course Based on Data Mining

2.1. The Concept of Data Mining

The process of extracting hidden, potential value and information from massive databases is called data mining. In the process of applying data mining technology, it is not only necessary to use scientific algorithms to construct data mining models. At the same time, it is necessary to ensure that data mining technology does not conflict with the complex information technology application environment [3]. On the other hand, data mining technology requires the participation of data mining analysts. In contrast, data mining technology is not intuitive and cannot judge the significance of mining patterns in real life. Therefore, attention should be paid to the participation of data mining analysts.

2.2. Positive Psychology Theory

Positive psychology is a revolution in the field of psychology. The theory focuses on the positive psychological qualities of human beings, and attempts to reinterpret and practice psychology with new ideas, and promote the formation of individual good psychological characters and behavior patterns [4]. Positive psychology is a positive turn in the field of psychology research. It aims to help human beings achieve individual happiness and harmonious improvement. It emphasizes the attention to individual positive personality qualities and positive psychological experience, and also studies and explores the social environment closely related to individual improvement. Positive social environment. Compared with traditional psychological theories, positive psychology focuses on the positive aspects of human nature, and believes that human beings contain positive personality traits, which are powerful energy for individuals to resist mental illness. Therefore, in the practice of integrative sandplay therapy, the therapist's primary task is to help individuals discover, understand, and learn how to regulate their inner positive energy. Sandplay production is not only a process of individual emotional catharsis and expression. As a therapist, not only should we respond to and relieve the negative emotional expression of the client, but more importantly, we should discover the positive emotional experience and inner energy hidden in it [5].

2.3. Sandbox Games

Sandplay is a method of creating a "free and safe" space for sand players, allowing children to make full use of sand, water and sand tools to create in the sand table, and to promote the communication of the inner unconscious and consciousness [6]. Through the free combination of sand, water and sand tools, the inner psychological state can be presented and externalized in the sand table, so as to realize the unity of consciousness and unconsciousness, inner and outer psychology. Themed sandplay, as the name suggests, is based on the "theme" design as the carrier, with sandplay as the main form of activity, with the purpose of promoting the psychological improvement of individuals or groups of different ages, and is a more central game derived from sandplay. Sexual and operational gameplay [7] (figure 1).

Figure 1. One of the sandplay groups.

2.4. Healing Mechanism of Group Sandplay

The group sandbox game can simulate the human interaction in the real world. Members can learn from each other in the group the way of doing things and ideas of others. The so-called better means that the group members need to take into account the feelings of others and express themselves according to the theme of the sandbox., in the mutual run-in with other members, each member of the group can grow, and at the same time, the group has become more and more tacit, and the integration of the works created is also higher and higher [8]. At the same time, due to the sandplay mode, each member of the group can safely express their negative emotions and negative thoughts, so as to achieve self-healing and personality integration in the creation. In the group sandplay, the counselor always maintains the attitude of silent witness, empathic understanding, and motherhood principles. It seems that the consultant does nothing but just sits and pays attention to the client making the sand table. In fact, the consultant is helping the client to freely and devote himself to creating his own spiritual world works through his speechless performance. Communication helps the visitor integrate their minds; the so-called empathic understanding is to put oneself in the visitor's mind and emotions. The empathetic understanding of sandplay games is not only the understanding of words, but also needs to have an imagination of the scene created by the visitor and the process of placement. The feeling of a common scene makes the visitors feel that they are respected and understood; the relationship between counseling and interviewing in the sandplay game is a mother-child relationship, and

the visitors can feel warmth, care, tolerance, acceptance, freedom, safety, motherhood Always believe that the child will grow up and mature, believe in the potential of the child, and believe that through hard work, the child will be more adaptable to life, and the personality will be more integrated [9].

2.5. Design Principles of Psychological Sand Table Online Courses

The design of the psychological sand table online course should be guided by positive psychology, combine the theoretical basis and principles of developmental psychology and educational psychology, and adhere to the improvement of students [10]. At the current level of improvement, determine the appropriate curriculum objectives in the zone of proximal improvement, select appropriate content, and use scientific teaching methods to implement the curriculum. The design of the psychological sandbox online course should follow the following principles:

(1) Student-oriented. In the process of designing and implementing the psychological sandbox online course, we must adhere to the student-oriented approach [11]. The purpose of the psychological sand table online course is to promote the psychological health of students. Students are the main body of the whole course, and the subject status of students must be adhered to. The theme selection and design of the course must be based on the existing experience of the students, and the implementation of the course should also conform to the actual level and ability of the students. The design of the entire course should focus on students as the main body and follow the laws of physical and mental improvement of young students., as well as the current state of students, adhere to the student-oriented, and respect the dominant position of students.

(2) Focus on the situation. The psychological sand table online course should be based on experience and participation, and experience and perception in the activities [12]. The psychological sand table online course needs to create a situation, so that students can experience and perceive in the situation, gain emotion and cognition in the perception, so as to obtain a positive experience, tap their positive emotions, shape their positive psychological quality, and enhance their sense of happiness. The situation created by the positive psychology sand table online course should be closely related to the actual life and be close to the actual life of the students, so as to stimulate their enthusiasm.

(3) Take the activity as the carrier. The psychological sand table online course is different from other subject courses. The psychological sand table online course is not a course that focuses on mastering scientific knowledge. It is mainly in activities and situations, with experience and participation as the mainstay. Gain positive experiences in activities, trigger thinking, change cognition, and gain positive emotions. In the activities, the potential of students is tapped and the positive psychological quality is shaped. The design of the psychological sand table network course should pay attention to the use of various forms of activities to give students a space for full experience. The experience and cognition generated during the activity are more important than mastering the knowledge of mental health education.

3. Investigation and Research on the Design of Network Platform for Psychological Sand Table Course Based on Data Mining

3.1. Course Content Design

The sandbox game course is designed for 12 hours, 2 hours each time, and each group has about 8 students. The content of the 12 hours can be divided into five categories: self-knowledge, emotion management, interpersonal communication, learning ability, and others.

3.2. Research Methods Based on Data Mining

This paper takes the students from Class 1 and Class 2 of the psychology education major of Wuyi University in Fujian Province as the research object, with 30 students in Class 1 and 30 students in Class 2, a total of 60 students, so as to carry out group psychological sand table game courses in colleges and universities. Questionnaire survey and independent sample t-test were carried out. The t-test formula used in this paper is as follows:

$$t = \frac{\overline{X} - \mu}{\frac{\sigma X}{\sqrt{n}}} \tag{1}$$

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} \tag{2}$$

4. Evaluation of the Implementation Effect of the Psychological Sand Table Course Network Platform

Through the data of two classes, taking class as the test variable, class 1 was set as the experimental class, and class 2 was set as the control class. The post-test data of the class are shown in table 1 and figure 2.

Table 1. Class test data results.

Project	T	
	1st class	2st class
Relationship with classmates	2.452	2.354
Student relation	2.142	2.047
Confidence level	1.984	1.967
Self-awareness	2.548	2.458
Emotional stability	2.861	2.694
Learning adaptability	0.987	0.782

Through the test results, in general, there is a certain difference in the post-test data between the first class and the second class, which indicates that the psychological sand table online course has a good effect, has a great impact on students, and can cultivate students' autonomous learning ability and the interaction between teachers, students

and classmates. The ability of mutual cooperative learning, etc., aims to solve the individual needs of different students, and at the same time meet the modern needs of psychological sand table online course learning.
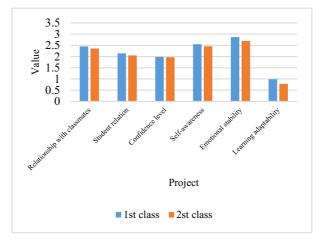

Figure 2. The test results of psychological indicators of differences between two classes after experiment.

5. Conclusions

With the improvement of network technology and data mining technology, the psychological sand table network course platform, as a database application system, needs to go through a long period from generation to perfection, and it is also a difficult system engineering, so that its functional modules can be continuously improved., so that the system resource sharing performance is continuously optimized. Compared with other platforms, the psychological sand table online course platform is more simple and auxiliary, which reduces the difficulty of designing the online course platform, reduces the improvement time consumption caused by the lag of technical training, enriches the psychological sand table online course resources and improves the teaching content of design courses The timeliness, and promote the overall improvement of the psychological sand table online course education in major colleges and universities.

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