Sport Instructional Mode Based on Psychological Fitness Education Environment

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Abstract

With the continuous progress of sci & tech, social competition has become more intense, and the pressure on human beings has not eased with the improvement of material life. Sport education principle is Sport education that tends to the original nature. Making use of the charm of Sport, giving psychological health education, counseling, consultation and treatment to university students by means of Sport therapy, solving their psychological problems in time, alleviating their psychological conflicts and obstacles, enabling them to get rid of their psychological difficulties, restore their psychological balance, improve their self-confidence, and enhance their adaptability to society and environment and their endurance to setbacks, are the important contents of implementing comprehensive quality education in colleges and universities at present. In the assessment of the effectiveness of instructional mode, it not hard to seen that compared with the traditional psychological fitness instructional mode, the students in Sport instructional mode have improved their learning ability and compressive ability. Therefore, it is of positive significance to apply Sport instructional mode to students' psychological fitness education, which can promote the innovation of psychological fitness education.

Keywords: Psychological fitness; Fuzzy C-means clustering; Sport instructional mode.

1. Introduction

University students' psychological fitness problems have attracted more and more attention of the society, which is a manifestation of the progress of social civilization. With the continuous progress of sci & tech, social competition has become more intense, and the pressure on human beings has not eased with the improvement of material life (Sockalingam et al., 2021). University students are a group with high expectations. They have a strong desire to make something of themselves, but their psychology is immature, lacking social experience and poor adaptability. At present, the psychological fitness of university students has attracted the attention of all sectors of society (Seney et al., 2019). Some students make some excessive behaviours because they can't resolve their inner emotions or face pressure, which may result in life-long consequences. This will not only affect the reputation of the university, but also deal a heavy blow to the family (Bommersbach et al., 2022; Galante et al., 2022). With the continuous progress and development of society, university students are under pressure from family, society, school and other aspects, and their psychological fitness is not optimistic, especially the negative impact of the Internet on them. Paying attention to and attaching importance to students' psychological fitness has become an urgent task faced by educators (Zhang et al., 2021). As a base for training skilled talents, the school aims to promote quality education in an all-round wayn (Aldarmaki & Yaaqeib, 2015). Making use of the charm of Sport, giving psychological health education, counseling, consultation and treatment to university students by means of Sport therapy, solving their psychological

problems in time, alleviating their psychological conflicts and obstacles, enabling them to get rid of their psychological difficulties, restore their psychological balance, improve their self-confidence, and enhance their adaptability to society and environment and their endurance to setbacks, are the important contents of implementing comprehensive quality education in colleges and universities at present (Denerel et al., 2021). Based on the theory of Sport psychology, this paper puts forward that receptive Sport therapy and Orff group Sport therapy are the new media to intervene in university students' psychological intervention, and constructs an identification model of students' psychological fitness based on FCM algorithm, and analyzes the role of Orff Sport instructional mode in students' psychological fitness.

Whether students' psychological fitness is healthy or not has become an important prerequisite and strength guarantee for university students to enter the society, enter the future and compete with the world (Narrow, 2022). idea of Sport education plays an obvious role in supporting learners, and it has remarkable effects from intellectual development to psychological growth. To some extent, the level of psychological fitness can be said to be more important than the level of professional knowledge, and a person's healthy psychology is the basis and guarantee for exerting professional knowledge or potential (Chung et al., 2022; Narrow, 2022). It is necessary to intervene the psychological problems of university students through Sport therapy. Therefore, it is necessary to strengthen the research on students' psychological fitness problems and analyze the advantages of Sport therapy. This paper analyzes the active structure of Sport education in psychological fitness education, so as to provide theoretical reference

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for the application of Sport education in Sport therapy (Craig et al., 2022). Its main contributions and innovations include:

(1) Based on the theory of Sport psychology, this paper puts forward that receptive Sport therapy and Orff group Sport therapy are the new media to intervene in university students' psychological intervention, and constructs an identification model of students' psychological fitness based on FCM algorithm.

(2) This study finds out the influence of class structure and psychological fitness factors hidden in the attributes of psychological fitness data on the clustering results, and provides reference for colleges and universities to formulate corresponding strategies for early prevention and intervention of mental disorders.

In the first section, the background and significance of the research on students' psychological fitness education are introduced, and the identification model of students' psychological fitness status based on FCM algorithm is proposed. The second section is related work, which analyzes the research of related scholars in the field of students' psychological fitness education, and puts forward the research methods and innovations of this paper. The third section is the theory and model part, which expounds the significance of Sport instructional model for psychological fitness education and constructs a model for identifying university students' mental state. The fourth section is the analysis and discussion of the results. The validity of the psychological recognition algorithm in this paper is verified by comparative experiments, and the effect of Sport instructional mode on students' learning ability and compressive ability is verified by this model. The fifth section is the conclusion, summarizing the methods and contributions of this paper, as well as the limitations of the psychological fitness identification model in this paper, and then proposing the next research direction of students' psychological fitness education identification.

2 Related Work

Ruggiero is studying the psychological fitness problems of university students, and the main DM algorithms are ID3 decision tree algorithm and Apriori association rule algorithm, which analyzes some internal relationship between mental problems and their attributes (Kim et al., 2019; Ruggiero et al., 2020). Perryman et al. proposed an algorithm to predict students' dropout (Perryman et al., 2022). Compared with all students in universities, it is relatively rare for students to drop out of school, which is a problem of data imbalance. In such data, most of them have more examples than a few. Traditional algorithms predict minority classes as majority classes, and then ignore minority classes. When the data grows with unbalanced characteristics, it is difficult for traditional algorithms to solve these problems. Goodwill et al.

studied the application of DM tools in medical care, and used psychological fitness and breast cancer data sets to evaluate the application effect of DM tools in this field (Goodwill et al., 2018). Hsu et al. developed an algorithm framework based on disi-hard, which combined heterogeneous characteristics to predict the grant portfolio that students should receive (Hsu et al., 2020). Recto proposed a regularization model by taking advantage of the similarity and label dependence among students, and applied it to real data sets. Compared with the existing methods, their methods can always show better performance (Recto & Dimmitt-Champion, 2018). Stephanie et al. proposed a data-driven framework based on students' behavior in school to predict their career choices after graduation (Armes et al., 2018). Marchionatti et al. analyzed the changing trend and gender differences of university students' campus behavior (Marchionatti et al., 2022). They think that university students' campus life may have a substantial impact on their academic achievements and future career direction. Therefore, how to understand university students' campus life is an important topic worth discussing, especially the big data collected by campus information system. Trottier et al. found poor-performing university students according to their behavior patterns, and analyzed the relationship between students' behavior and performance (Romain et al., 2016). Xiao preprocesses the original behavior data recorded by smart card, extracts behavior characteristics from statistics and correlation, describes students' behavior patterns, and then adopts multi-task model to learn the results of each course at the same time (Xiao et al., 2022).

3 Methodology

3.1 The significance of Sport instructional model to psychological fitness education

Sport education contributes to the perfection of personality. Personality is constantly being shaped and improved. No matter what kind of person, there will always be some defects in his character. Personality paranoia leads to extreme thinking, which is an important reason for university students' unhealthy psychology. Different people will have different reactions to the same Sport. rhythm teaching mostly uses simple percussion instruments, such as triangle, drum and xylophone, etc., which can also be played with guitar or piano. In the group improvisation training, patients are assisted to sit in a circle, and a variety of Sportal instruments are placed among the patients. Students who receive Sport therapy choose their favorite Sportal instruments by themselves. People's perception of Sport is formed by long-term evolution. In this long process, human beings not only formed a highly developed auditory system, but also became more and more complex in their response to sound. People can not only hear the sound, but also feel

it and be excited. Different forms of Sport can arouse different psychological resonance, which is similar to the psychological reaction aroused by natural things, thus arousing the imagination and thinking of the corresponding things. The principle of sound generation is the vibration of sound waves, but not all sound waves constitute Sport. Sport is sound wave vibration with a certain frequency, rhythm and intensity, and then it is transmitted to the human brain through auditory nerve and acts on the sensory system. People have different reactions to different concerts (Barr et al., 2013).

The biggest feature of group Sport therapy is that it pays attention to the expansion of university students' inner world (Wong et al., 2018). Receptive Sport therapy achieves the therapeutic purpose through different Sportal experiences generated in the stage of listening. Finally, the effect of Sport therapy in this way is very remarkable. In the stage of listening to Sport, students are influenced by the beauty of Sport, unconsciously releasing and resolving their painful emotions and turning them into a positive life experience. Due to the strong harmony of Sport, interpersonal relationships are more stable. When Sport is chaotic, personal characteristics and contradictions are more likely to appear. Therefore, the impromptu Orff Sport education can make patients clearly feel the interpersonal relationship from the outside world, and at the same time, it can develop patients' Sport memories and enhance the memory function that is gradually deteriorating.

Sport contains rich emotions and influences students in a subtle way. Sport itself is an important social means (Matsuda et al., 2022). University students often shut themselves off and refuse many social activities because they are not good at words and are afraid to talk. Accepted Sport therapy involves physical contact, singing communication, verbal communication and information transmission to the students being treated through group Sport activities. Since ancient times, Sport has an inseparable relationship with people's body and mind. Different Sport styles will affect different body structures, relieve people's emotions, inspire people's feelings, slow down people's emotions, help to get rid of mental tension and pressure, play a role in adjusting the body's healthy structure, and help to restore and improve the health status.

3.2 Identification model of students' psychological fitness status based on FCM algorithm

Influenced by traditional ideas and higher education, the severe employment form of university the inferiority complex that they can only go to higher vocational colleges if their scores in college entrance examination are not satisfactory. They think that their foundation and learning ability are poor, and they are under great psychological pressure. With the weariness of learning, I don't want to learn theoretical courses, and I also lose interest in practical operation courses.

Most students in higher vocational colleges go to school far away from their parents, and they have to decide on their own about their study and life. Because individuals' self-care ability, adaptability and the ability to resist setbacks are generally weak, they can't achieve a good role change, which leads to negative emotions such as anxiety and depression (Holen et al., 2018). University students' psychological fitness problems have attracted the attention and attention of all relevant units. How to judge the psychological fitness problems more accurately and quickly and effectively solve them is the most important thing. Faced with a large amount of psychological fitness data, it is impossible to analyze or make decisions about psychological fitness artificially, so it is the general trend to establish an intelligent analysis system. The choice of test attribute is determined by the attribute with the highest information gain value. Sample set segmentation is determined by the value determined by the test attribute, and different values divide the sample set into multiple sub-sample sets. The identification stage of psychological fitness problems based on multi-source data is shown in Figure 1.
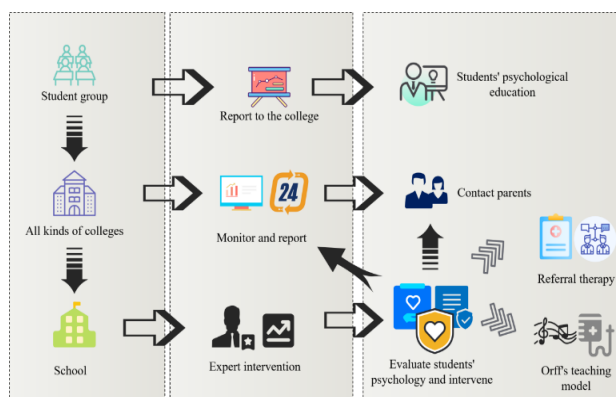

Figure 1 Identification stage of psychological fitness problems

Clustering is an important technology in the field of DM. By discovering the similarities and differences between data, we can further explore the potential relationship between data. They have certain fuzziness, and if we use the clustering analysis method to classify some data, it will cause great errors.

Given a sample set $(A_1, A_2, \ldots, A_k)$ with k attributes. Suppose a sample is given, the value $(a_1, a_2, \ldots, a_k)$ of the sample on each attribute. Then, the probability that the sample belongs to class c_i is $P_r(C = c_i | A_1 = a_1 \wedge \ldots, \wedge A_k = a_k)$. Bayes theorem is:

$$P_r(C = c_i | A_1 = a_1 \wedge \ldots, \wedge A_k = a_k) = \frac{P(A_1 = a_1 \wedge \ldots A_k = a_k | C = c_i)}{P_r(A_1 = a_1 \wedge \ldots \wedge A_k = a_k)} P_r(C = c_i) \quad (1)$$

$P_r(C = c_i)$ is the prior probability of each class, $P_r(A_1 = a_1 \wedge \ldots \wedge A_k = a_k)$ is independent of any c_i,

and $P_r\left(A_1 = a_1 \wedge \ldots A_k = a_k \middle| C = c_i\right)$ is the conditional probability.

The frequency $freq(C_i, T)$ of C_i in each $i \in [1, NClass]$ is calculated. If $freq(C_i, T)$ all belong to one class C_j or only a few training data fields are different from other classes, it is determined that the node is a leaf node, and the category it belongs to is C_j. If the quantity of classes to which the data set of this node belongs is greater than the quantity of classes, the information content of each node will be calculated:

$$gain = \inf o(T) - \sum_{i=1}^{s} \frac{|T_i|}{T} \times \inf o(T_i) \qquad (2)$$

$$\inf o(T) = -\sum_{j=1}^{Nclass} \frac{freq(C_j, T)}{|T|} \times \log_2\left(\frac{freq(C_j, T)}{|T|}\right) \qquad (3)$$

In the actual training process, the learning speed often chooses an adjustable parameter that will change with the training. The stage of gradient descent is expressed as:

$$x+ = \eta \frac{dy}{dx} \qquad (4)$$

According to the interception principle of the optimal path, it only needs to calculate:

$$U(S) = R(X) + \gamma \sum_{S'} P(S \to S')U(S') \qquad (5)$$

Where R is the reward value of state S, plus the U value of all possible states, multiplied by the average of probability, and then multiplied by the discount factor. Use this formula to find the U value of state S, and get the relationship with the subsequent state.

By using DM technology to analyze students' psychological fitness problems, the factors that are easy to show mental problems in psychological fitness data are excavated and analyzed, which provides reference for solving and preventing mental problems in time. The stage of psychological fitness DM is shown in Figure 2.
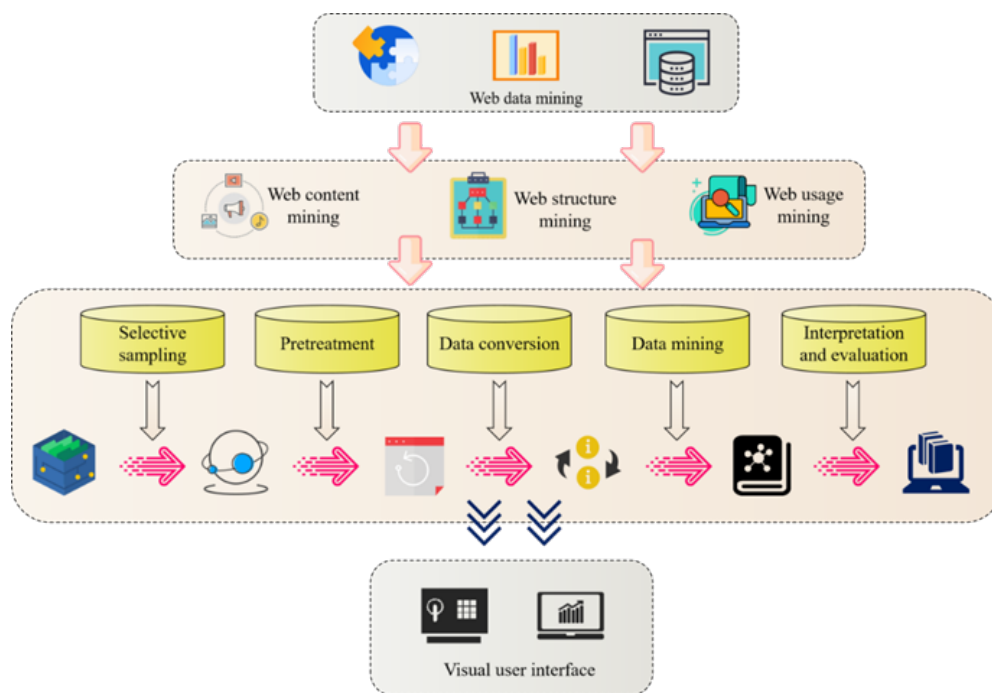

Figure 2 Psychological fitness DM process

The related data of students' psychological fitness assessment system is derived, and the processing operation depends on the amount of data. The basic information data of students comes from the educational administration management system of the school. As some students fail to improve their personal information in time after entering school, some information such as family status and single parents are missing. Data integration is the stage of integrating records in multiple related data sets into a new data warehouse according to the mining target content.

What is used to define the threshold for measuring support is called minimum support, which represents

the lowest importance standard of project set in statistics. Usually, the threshold used to define the confidence level is called the minimum confidence level, which represents the lowest reliability standard of association rules. Set the factor set U and the assessment grade set V of the analysis object of psychological fitness status:

$$U = \{u_1, u_2, \ldots, u_m\} \qquad (6)$$

$$V = \{v_1, v_2, \ldots, v_m\} \qquad (7)$$

Fuzzy assessment is carried out on each factor in U

according to the grade index in the assessment set, and the assessment matrix is obtained:

$$R = \left(r_{ij} \right)_{n \times m} \quad (8)$$

In which r_{ij} indicates the degree of u_i's membership in v_i. After determining the importance index of each factor, record it as:

$$A = \{a_1, a_2, \ldots, a_m\}, \quad \sum_{i=1}^{n} a_i = 1 \quad (9)$$

Synthetic:

$$\overline{B} = AR = \left(\overline{b}_1, \overline{b}_2, \ldots, \overline{b}_m \right) \quad (10)$$

After normalization, it is obtained that:

$$B = \{b_1, b_2, \ldots, b_m\} \quad (11)$$

In this way, students' psychological status can be evaluated. The school psychological fitness management system has completed the collection, sorting, query and simple result analysis of students' psychological fitness assessment, but this only obtains the surface data of psychological fitness.

4 Result Analysis and Discussion

4.1 Validity analysis of mental state recognition model

The design and implementation of students' psychological fitness assessment system is based on students' psychological fitness data, which can realize the input of students' psychological questionnaire information and result management, mainly embodied in the establishment of psychological fitness database and data collection and management (Carlisle, 2022). The sample data in the training set and the test set have characteristics and labels, but their functions are different. The training set is used in the training stage of the model, and the parameters of the model can be adjusted through the labels in the training set samples. During the training process, every time the model trains a sample, the parameters will be adjusted once. The test set is used in the test stage of the model. By comparing the labels of the test samples with the predicted values, the model can be evaluated, and the whole process will not change any parameters. Through the DM function, this paper classifies and analyzes the psychological data of students in school, and through the correlation analysis of some psychological behaviors, it can grasp the trend of students' psychological changes in time, and help the teachers of university students' psychological counseling center to effectively prevent and guide students' psychological problems.

When designing machine learning experiments, the division of data sets is particularly important.

Reasonable division of training set and testing set is helpful to train and verify the model. The algorithm for identifying students' psychological fitness problems based on multi-source data can identify students with psychological fitness problems to a certain extent, but the experimental results have not reached our ideal. From the psychological fitness assessment database collected by a large quantity of students, valuable information can be extracted to guide and educate students' healthy psychology, so that students' psychological counseling can be more effective. Test samples are respectively input into two assessment models for testing, and the scatter diagram of the predicted value and the actual value of the test samples by using ID3 is shown in Figure 3. The scatter diagram of the predicted value and the actual value of the test sample tested by the FCM algorithm assessment model is shown in Figure 4. The dots on the graph indicate the ratio of the predicted value to the actual value.
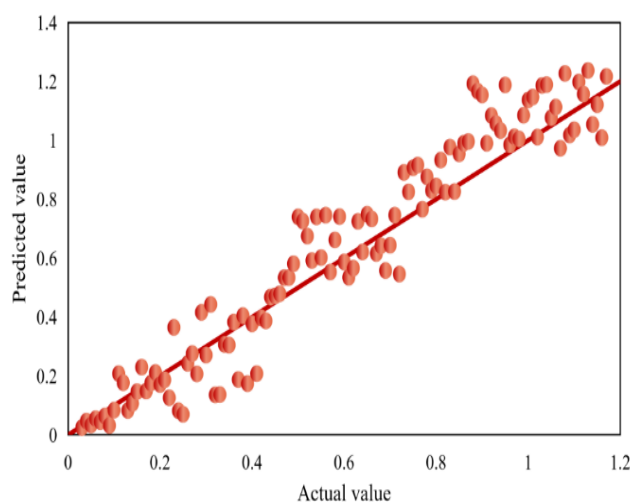

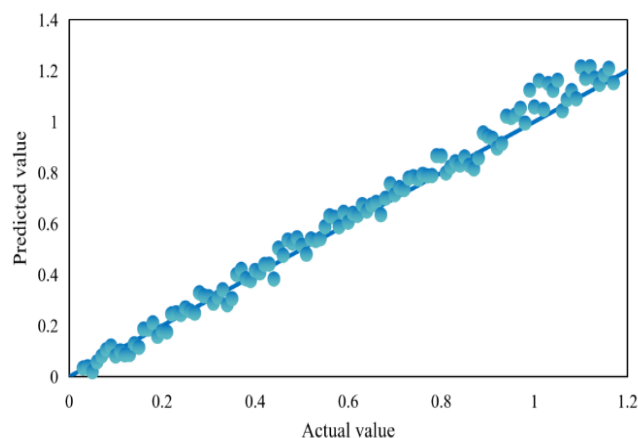*Figure 3* Scatter diagram of actual value and predicted value of ID3

Figure 4 Scatter diagram of actual value and predicted value of FCM algorithm

In the initial stage of designing the assessment system of students' psychological fitness, the first task is to organize and design the system architecture. The performance comparison of the two models for data

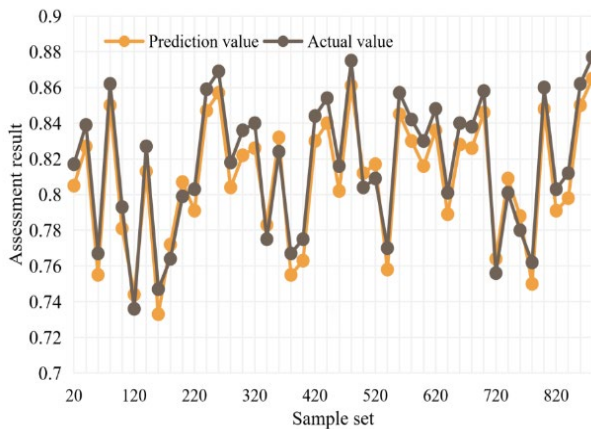processing and assessment of test set is shown in Figure 5 and Figure 6.

Figure 5 Comparison between predicted value and actual value
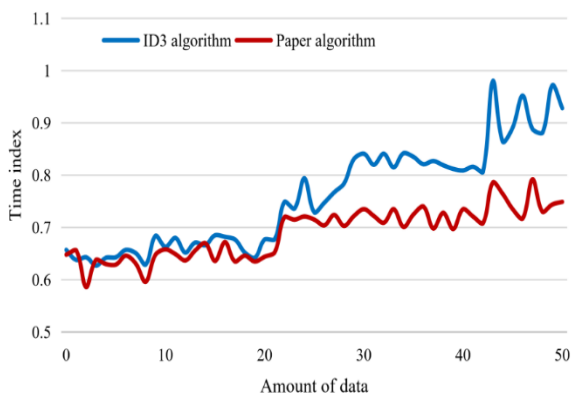

Figure 6 Comparison of algorithm running time

DM technology is to mine the hidden laws and value contents of data to solve specific problems. People can also use computer applications to complete the same functions when they don't master the technology. A decision tree is formed by training sample data sets, and all training sets are classified on the first page.

If they are not correctly classified, other examples are added to the training set and the above operations are performed circularly until a correct decision set is produced. For the instability of the sample set after partition, the quality is good or bad. The assessment results after network training and expert assessment results are shown in Table 1. As can be seen from Table 1, all training samples are close to expert assessment results.

Table 1: *Assessment results of experts and FCM*

Sample number	Expert appraisal	FCM
1	0.931	0.929
2	0.745	0.749
3	0.807	0.813
4	0.625	0.631
5	0.788	0.781

On the basis of introducing information fanning theory and the idea of class merging, FCM algorithm introduces attribute weighting parameters, finds different weights of each attribute, reflects the degree of influence of sample attributes on clustering results, makes the position of the initial clustering center constantly adjust to be closer to the actual center point, makes the final clustering results more accurate, and discovers the potential relationship between data attributes. The psychological fitness results and expert assessment results obtained through simulation are shown in Table 2. The results of psychological fitness simulation are also close to the assessment results given by experts.

Table 2 *Simulation assessment results and expert assessment results*

Sample number	Expert appraisal	FCM
1	0.672	0.669
2	0.653	0.648
3	0.739	0.735
4	0.622	0.625
5	0.749	0.751

Through the comparison between Table 2 and Table 3, the psychological fitness recognition model in this paper not only has the training and prediction accuracy within the acceptable range, but also the error of the test sample is very close to that of the test sample. Therefore, the psychological fitness status identification model based on FCM algorithm is a reasonable and feasible assessment model.

4.2 The influence of Sport instructional mode on university students' learning ability and compressive ability

To solve the psychological problems of university students, we must understand their causes and characteristics. Today's society is dominated by market economy. The fierce competition system not only promotes the development and prosperity of all aspects of society, but also causes a series of social problems. Although all kinds of opportunities for university students in the situation of reform and opening-up are unprecedented in any previous period, a series of accompanying social problems have caused many psychological contradictions among university students, and they have deeply felt the pain caused by the social transformation period. School is not only a place for teaching, but also a base for educating people. University students spend most of their time in school. Education plays an important role in the formation of a person's personality. Adolescent university students' physical and mental development tends to mature, but they have not yet formed a completely healthy personality. Judging from the psychological confusion of university students, many of them are caused by personality disorder. At present, psychological counseling for students is often a mere formality. There are few specially trained psychological counselors in schools, and outdated educational concepts lead to many psychological problems of students that cannot be discovered. This kind of treatment has further aggravated the psychological problems of university students.

There are many contents in the Sport class that can greatly improve students' learning ability and compressive ability. In teaching, teachers should be discerning, be good at discovering the originality and sparkle of students' works, and affirm and encourage them in time. In this paper, FCM algorithm is used to grade students' learning ability and compressive ability. Figure 7 shows the changes of students' learning ability and compressive ability scores under the routine psychological fitness education. Figure 8 shows the curve of the grading of learning ability and compressive ability with the orderly advancement of Sport instructional mode.
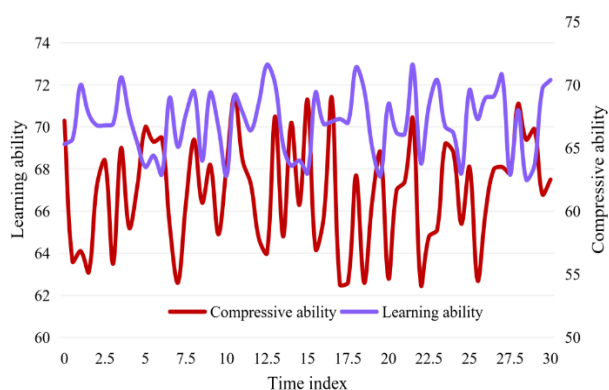

Figure 7: Scores of students' learning ability and compressive ability under traditional psychological fitness education
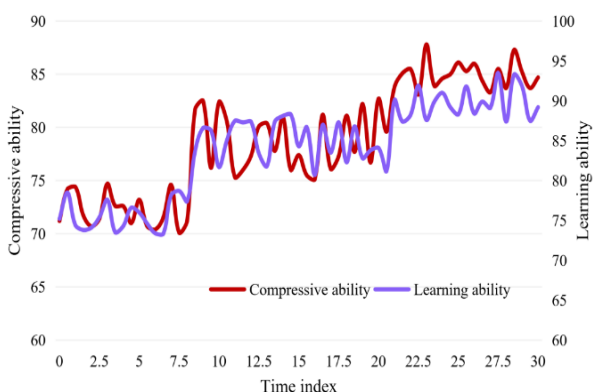

Figure 8: Score of students' learning ability and compressive ability under the deep integration of Sport education

Traditional psychological fitness education of university students' learning ability and compressive ability basically show disorderly changes, and the improvement of students' ability is not significant. In the simulation results of Sport instructional mode to cultivate university students' learning ability and compressive ability, it not hard to seen that although the assessment of students' learning ability and compressive ability did not change obviously in the early stage of instructional mode implementation, the score showed an obvious acceleration trend when the cycle was prolonged. Therefore, Sport instructional mode can promote the cultivation of university students' learning ability and compressive ability.

5 Conclusions

Based on the theory of Sport psychology, this paper puts forward that receptive Sport therapy and Orff group Sport therapy are the new media to intervene in university students' psychological intervention, and constructs an identification model of students' psychological fitness based on FCM algorithm, and analyzes the role of Orff Sport instructional mode in students' psychological fitness. How to improve the psychological quality of university students through Sport education is a long-term work. Therefore, using Sport education to improve psychological fitness has a broad prospect. It organically combines theory with reality and effectively promotes the establishment of a harmonious environment in colleges and universities. It is of positive significance to apply Sport instructional mode to students' psychological fitness education, which can promote the innovation of psychological fitness education. In the simulation results of Sport instructional mode to cultivate university students' learning ability and compressive ability, it not hard to seen that although the assessment of students' learning ability and compressive ability did not change obviously in the early stage of instructional mode implementation, the score showed an obvious acceleration trend when the cycle was prolonged. Therefore, Sport instructional mode can promote the cultivation of university students' learning ability and compressive ability.

Reference

Aldarmaki, F. R., & Yaaqeib, S. I. (2015). Psychology and psychological fitness services in the United Arab Emirates. *Journal of the Faculty of Agriculture Kyushu University*, *54*(1), 65-71.

Armes, S. E., Somo, C. M., Khann, S., Seponski, D. M., Lahar, C. J., Kao, S., & Schunert, T. (2018). Mental health indicators of suicide in Cambodian women. *Asia Pacific Journal of Public Health*, *30*(1), 7-18.

Barr, W., Brown, A., Quinn, B., McFarlane, J., McCabe, R., & Whittington, R. (2013). How effective is high-support community-based step-down housing for women in secure mental health care? A quasi-experimental pilot study. *Journal of Psychiatric and Mental Health Nursing*, *20*(1), 41-49.

Bommersbach, T. J., Rosenheck, R. A., & Rhee, T. G. (2022). National Trends of Psychological Fitness Care Among US Adults Who Attempted Suicide in the Past 12 Months. *JAMA psychiatry*, *2022*(3), 79.

Carlisle, P. J. W. (2022). Undergraduate Student Perceptions of the Efficacy of an Intensive Clinical Orientation for Mental Health Nursing. JOURNAL OF THE AMERICAN PSYCHIATRIC NURSES ASSOCIATION,

Chung, S., Szatmari, P., & Rodak, T. (2022). Assessing the impact of psychological fitness difficulties on young people's daily lives: protocol for a scoping umbrella review of measurement instruments[*BMJ open*, *12*(4), 82-85.

Craig, P., Barr, B., Baxter, A. J., Brown, H., Cheetham, M., Gibson, M., Katikireddi, S. V., Moffatt, S., Morris, S., & Munford, L. A. (2022). Evaluation of the mental health impacts of Universal Credit: protocol for a mixed methods study. *BMJ open*, *12*(4), e061340.

Denerel, N., Şenışık, S., & Köyağasıoğlu, O. (2021). Effects of long-duration home isolation linked to the COVID-19 pandemic on mental health of adolescent athletes. *Pediatric exercise science*, *2021*(4), 33.

Galante, J., Friedrich, C., Dalgleish, T., White, I. R., & Jones, P. B. (2022). Protocol: Mindfulness-based programmes for mental health promotion in adults in non-clinical settings: protocol of an individual participant data meta-analysis of randomised controlled trials. *BMJ open*, *12*(4).

Goodwill, J. R., Watkins, D. C., Johnson, N. C., & Allen, J. O. (2018). An exploratory study of stress and coping among Black college men. *American journal of orthopsychiatry*, *88*(5), 538.

Holen, S., Waaktaar, T., & Sagatun, Å. (2018). A chance lost in the prevention of school dropout? Teacher-student relationships mediate the effect of mental health problems on noncompletion of upper-secondary school. *Scandinavian Journal of Educational Research*, *62*(5), 737-753.

Hsu, Y., Lu, F. J., & Liang, J.-H. (2020). Proactive personalities, ego-identity status, and career aspiration among college student athletes. *International Journal of Sport Psychology*, *51*(4), 342-358.

Kim, B., Aronowitz, T., & DeMarco, R. (2019). Maintaining Fidelity in a Student Peer Education (SPE) Program for College Students. Nursing research,

Marchionatti, L. E., Caye, A., & Kieling, C. (2022). The mental health of children and young people living in big cities in a revolving postpandemic world. *Current opinion in psychiatry*, *35*(3), 200-206.

Matsuda, Y., Halstead, V., Falcon, A., Valdes, B., Salani, D. A., & Reaves, R. P. (2022). Exploring the utility of nursing student-led health fairs: Educating the college population. *Public Health Nursing*, *39*(4), 847-855.

Narrow, W. (2022). Editorial: The Enigma of "Real World" Psychological Fitness Care. *Journal of the American Academy of Child and Adolescent Psychiatry*, *2022*(8), 61.

Perryman, C., Platt, S., & Ishino, F. M. (2022). Identifying the mental health profiles of black adolescents who experience school policing and school discipline: a person-centered approach. *Journal of the American Academy of Child & Adolescent Psychiatry*, *61*(8), 1034-1040.

Recto, P., & Dimmitt-Champion, J. (2018). Promotion of Mental Health among Perinatal Mexican-American Adolescents through Health Literacy. *Journal of Adolescent Health*, *62*(2), S59-S60.

Romain, A. J., Trottier, A., & Abdel-Baki, A. (2016). Predictors of healthy life habits prescription by mental health professionals treating individuals with psychotic disorders. EARLY INTERVENTION IN PSYCHIATRY,

Ruggiero, K. J., Davidson, T. M., Anton, M. T., Bunnell, B., Winkelmann, J., Ridings, L. E., Bravoco, O., Crookes, B., McElligott, J., & Fakhry, S. M. (2020). Patient engagement in a technology-enhanced, stepped-care intervention to address the mental health needs of trauma center patients. *Journal of the American College of Surgeons*, *231*(2), 223-230.

Seney, V., Insana, J., Hay, J., & Alberto, A. (2019). Development of Opioid Education Training for Pediatric Psychiatric Mental Health Nurses. JOURNAL OF THE AMERICAN PSYCHIATRIC NURSES ASSOCIATION,

Sockalingam, S., Kirvan, A., & Pereira, C. (2021). The Role of Tele-Education in Advancing Psychological Fitness Quality of Care: A Content Analysis of Project ECHO Recommendations. *Molecular human reproduction*, *2021*(8), 27.

Wong, M., So, K., Ng, S., & Ngan, J. (2018). Effects of sleep-focused treatments on sleep and mental health in a clinical psychology outpatient clinic. JOURNAL OF SLEEP RESEARCH,

Xiao, Y., Yip, P. S.-F., Pathak, J., & Mann, J. J. (2022). Association of social determinants of health and vaccinations with child mental health during the COVID-19 pandemic in the US. *JAMA psychiatry*, *79*(6), 610-621.

Zhang, X., Lewis, S., & Firth, J. J., 2021, 2021(15):51. (2021). Digital psychological fitness in China: a systematic review. *Psychological medicine*, *2021*(15), 51.