# **Innovation in Psychological Health of College Students Under Various Stress Management Interventions**

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ABSTRACT: In recent years, with the continuous changes in social environment and educational models, college students are facing increasing pressure and mental health problems are gradually becoming prominent. To effectively address these issues, research on the mental health of college students based on multiple stress management intervention plans has become a topic of great concern. This article will introduce and evaluate the study. This study explores the effectiveness of numerous stress management intervention programs on the mental health of college students. By comparing the experimental group and the control group, the study found that numerous stress management interventions can improve the mental health level of college students, reduce negative emotions such as anxiety and depression, and improve self-efficacy. Specific intervention measures include cognitive reconstruction, emotional regulation, coping skills training, life planning, and other aspects. The research results are of great significance for improving the mental health level of college students and promoting their comprehensive development.

Keywords: Multi-way Stress Management Intervention Technology, Mental Health, Education, Research

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## 1. Introduction

With the development of education in China, the upgrading of multi-channel pressure management and intervention technology systems is closely followed by [1]. Multi-channel pressure management intervention technology quickly spread to the world's people's vision. While contributing to student education and cultural communication, it also quietly expanded the students' thought cognition [2]. At the same time, in a series of education modes in the country, the application of multi-channel pressure management intervention technology is minimal. In contrast to the traditional model, computer technology has the power of reform. For example, the national education system follows the conventional book teaching of thousands of years, which not only makes the knowledge update unable to keep up with The Times but also is highly inefficient [3].

In the process of college students' mental health reform, the Internet and computer systems are the two main forces that are

inseparable [4]. Multi-channel pressure management intervention technology is based on the Internet. In this paper, the three aspects are organically integrated, and the research on college students' mental health innovation model under the background of big data is carried out. In this paper, the main characteristics of stress management intervention are put forward. At the same time, this paper integrates the real-time content of the mental health of college students into multi-channel pressure management intervention technology. This article carries on the system division and the reorganization. This provides the basis for studying the model in terms of technology [5]. Finally, education on college psychological health was integrated into the student's life, and the research and construction of the development model were completed [6]

## 2. Current Status

The compelling data show that the infiltration rate of psychological guidance and teaching reform is nearly 93.2% in applying multi-channel pressure management intervention techniques abroad [7]. This data shows that the problem is the original intention of this paper. Enough resources and energy are behind the small window of multi-channel pressure management intervention technology. In software construction, foreign countries have already eliminated a single window of Web effective scheme and replaced it with a series of computer algorithms [8]. In psychological counselling solutions, integrated data links, and the final expression form, foreign schools put college students' mental health and other content into teaching material distribution by the unit of infiltration. They penetrate every environment can come into contact with different people.

At the same time, the traditional teaching mode is severely impacted by modernized tools. Our country's multi-path pressure management intervention technology has entered the general field of view with its unique identity [9]. However, we continue to uphold the traditional mode of utilising multi-channel pressure management intervention technology resources. If this mode is not broken, it will be a huge loss in our country. Based on the multi-path stress management intervention technology, it will be implemented in college students' mental health education. It suggests that this will be suitable for all student groups' mental health counselling programs to infiltrate the teaching mode and the teaching scheme based on the material, as the model can be constructed using multi-channel stress management intervention technology. This can greatly improve the teaching efficiency [10].

#### 3. Methodology

#### 3.1. Multi-channel Pressure Management Intervention Technology Model

To input a large number of college students' mental health materials into the multi-channel pressure management intervention technology system, firstly, the construction of a data analysis system and the infiltration scheme of data should be considered. While building a computer model, this paper can classify many data. This paper selects a multi-channel pressure management intervention technology terminal infiltration algorithm for data screening and classification. The program consists of three parts: mental health material, a traditional teaching plan supplement and a targeted guidance program. An algorithm is used to construct the architecture. Considering its complexity, this paper introduces a node algorithm. Students with different learning abilities will be given a separate plan, and then the specific data and the students' actual situation framework will be constructed. Among them,

 $\lambda$  represents the total amount of mental health materials and n represents the students' planning and classification of different mental health levels, x and y respectively represent the adequate base and invalid base of psychological guidance material base. The specific algorithm is as follows:

$$\lambda = \frac{n\sum xy - \sum x\sum y}{\sqrt{\left[n\sum x^2 - \left(\sum x\right)^2\right]\left[n\sum y^2 - \left(\sum y\right)^2\right]}}$$
(1)

First, by calculating the above formula, the number of class classifications of students is drawn, and the links to the teaching materials applied are obtained. Then this paper classified the exclusive coding to administer students' mental health material and used computer data for automatic neat so that each student's learning ability for a learning effectiveness model can be built. This paper used the effectiveness model of the lap to express the mental health of students' custom materials effectively. y Total number is on behalf of all students, b represents classification divides the number of students, x represents categories in the teaching material, and technical base a is on behalf of the approach to stress management intervention. By calculating the following formula, we can get the classification integration scheme of students at different levels.

$$y = a + bx$$

$$b = \frac{n\sum xy - \sum x\sum y}{n\sum x^2 - (\sum y)^2}$$

$$a = y - bx$$
(2)

After integrating the teaching materials based on the student's learning ability, this paper took the unit as the standard and took it to the students' personal psychological health teaching materials.  $\beta$  represents the amount of students in the participation scheme, x the number of categories in targeted materials, y represents the combined analysis of the mental health of the teaching material, units on behalf of the students can accept the number of teaching material b for multi-channel technology base, stress management intervention on behalf of the student class n coefficient. It fitted the system architecture of the three levels, and then the complex mental health teaching material could be broken up and organized step-by-step. The final integrated data operation method is shown in the following formula.

$$\beta = \sqrt{\frac{\sum y^2 - a\sum y - b\sum xy}{n - 2}} \tag{3}$$

After completing the above algorithm, this paper can find the framework of the multi-channel pressure management intervention technology model for the research on the mental health effect of college students. The above framework is local to the whole. Build the local area first, and finally integrate it through the computer. Then the computer is used to input the algorithm model into the system, and the data is analyzed and regulated by the computer. After the final internal processing, this paper can get the scheme prototype. Check to ensure the steady running of the next step. The specific operation flow is shown in the flowchart below.

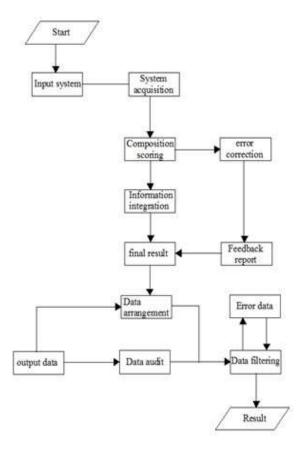


Figure 1. College students' mental health education based on data mining

Based on the above flow chart, after considering the integration plan and research, on the effectiveness system after the corresponding optimization, we use many ways to stress management intervention terminal infiltration technology, then in the self-effectiveness data port acquisition system. Through the cross-platform mode to receive data, this paper finally integrated the practical scheme and researched a new practical scheme operation system. The focus is on the link between mental health materials and individual students. Student information acquisition through the data analysis, namely the filtering algorithm of technology, from the various systems of extract the effectiveness of information data and the basic operation of the various effectiveness plan information, and then analyze them. These include information provided by the overall effectiveness programme. Second, we perform data processing, the main needs to be done is to integrate the information from different mental health teaching materials and processing through effectively dealt with, and in each small data analysis model and reach a consensus, running smoothly for the achievement of the scheme, design for each operation. The focus is on the link between mental health materials and individual students. This paper collects student information through data analysis. That is, the technology of screening algorithm is adopted to extract the information data and operation information of each practical scheme from each system and then analyze them. These include information provided by the overall effectiveness programme. Second, we do data processing. What we need to do is to integrate and deal with the information from different mental health materials. After effective processing and consensus with various small data analysis models, the smooth operation of each scheme is realized, and the operation of each design scheme is guaranteed.

#### 3.2. Calculation of Pose of Model Parameters

In the research process of the mental health system of college students in China, the technical problems can be optimized through scholars' research. However, we still can't reach the highest standard in the existing technical level and make breakthrough progress in constructing a digital model of multi-channel pressure management intervention technology. Based on the above background, as well as for foreign college students' mental health mode of observation, we found that the overall understanding of the standard of mental health of the university and students who participate in the survey feedback can guarantee the accuracy and efficiency of mental health. In further determining the accuracy of parameter positions, we need to refer to the three-line translation theory proposed by the American scientist Nave. With the existing technology to achieve the position of the calculation results, we use three-line translation theories to determine the optimal value, which can complete the psychological course for university mental health and computing tasks automatically. At the same time, in the process of questionnaire collection, we should adopt a variable calculation method. The method of changing variables can guarantee the rigour and feasibility of the algorithm. Suppose that an Angle's bit parameter is invariant, and then change the other bit parameter value. The constant transformation calculation can guarantee the preciseness of the multi-channel pressure management intervention technology algorithm and the accuracy of the data calculation to be used by the teaching staff.

Scatter data assembly Data based on X variables	Data structure representative coefficient value			
	X1(%)	X2(%)	X3(%)	
<10	10	3	2.5	
10~<50	3	1	3	
50~<80	2	0.5	1	
≥80	4	0.8	1	

Table 1. College Students' Mental Health Education Based on Data Mining

As shown in Table 1, in the stage of data processing integration, Z represents the results of mental health evaluation and u represents each unit factor and o represents the type of teaching materials and Z represents the distribution base of teaching materials in various aspects. Bring separate requirements into the formula as a complement to the calculation. Finally, we got the overlap chain between each student and the teaching material, so that the next step is to fill the frame.

between each student and the teaching material, so that the next step is to fill the frame.

$$Z = \frac{u_i}{2} + u_i^2 + \frac{o_i}{o^{0.8}} - \frac{2o_i}{u_i}$$
 (4)

We weighted the results of each parameter, and arranged the three-dimensional structure in each direction. Z represents the average value and  $x_i$  represents the horizontal and vertical textbook base and d represents the horizontal and vertical student level. n represents its integration coefficient and i represents the number of levels. Let's combine its composite structure weighted and then take its average value. The results are as follows:

$$Z(x) = x_i^2 + x\sqrt{x_i^{i-1}}$$
 (5)

$$Z(i) = \frac{\sqrt{d^2 - d^{0.4}} \sum_{i=2}^{n} d^n - d^{0.4n}}{5d}$$
(6)

In the process of setting up the mental health program of college students, we have been adhering to the traditional fixed mental health rules, so we cannot adjust adaptively. For today's students, the adjustment of educational system and national policy has

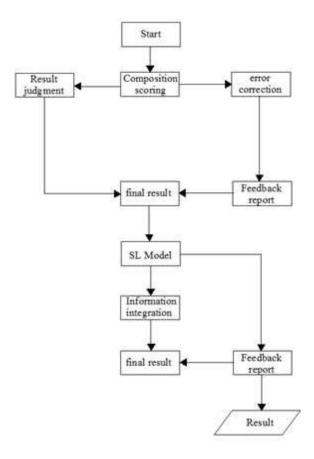


Figure 2. Data Mining Technology Building Model

a subtle influence on students' thinking style and learning attitude. The traditional mental health model can no longer keep up with the change of students' thinking in contemporary education. The mental health program of managing intervention technology can establish a mental health program suitable to the school's own system. This helps to improve the students' learning efficiency. The design background of multi-channel stress management intervention technology comes from calculation Computer technology. It can be based on students' mental health and psychological needs. Therefore, in the process of building the mental health system model, this paper cites the existing optimal solution algorithm, which is helpful in the selection of the multi-channel stress management intervention technology and get the optimal solution. This also ensures that students can achieve maximum efficiency in the course learning and experience process. The construction process is shown in figure:

## 4. Result Analysis and Discussion

In the process of setting up the mental health program of college students, we have been adhering to the traditional fixed mental health rules. So, after the completion of multi-channel stress management intervention technical system construction, we put the program into a key university for a phased trial. After entering the school, we took the control variable method to observe. The principle is that we randomly selected students and divided them into two groups. One group followed the traditional teaching model and the other group uses the mental health model based on the technique of multi-channel stress management intervention, which not only ensures the accuracy of the test, but also optimizes the mental health learning of students at all times. During the last final exam that was put into the test we selected two groups of students' mental health scores. By comparing the individual scores and weighted scores of mental health we found that there was a big gap between the mental health scores of the two groups of students. The mental health scores of the students using this scheme are significantly higher than those of the traditional model. The advantages and disadvantages of the scheme are analyzed and presented in tabular mode, as shown in Table 1 below.

Self -media data(%)	Intuitive performance	Learning range	Easy search	Acceptability	Achievements
Class1(1)	32.7	76.3	54.1	78.2	66.5
Class1(2)	38.2	79.6	55.0	70.5	70.7
Class1(3)	31.2	85.2	59.4	68.2	73.2
Class1(4)	10.3	82.1	66.5	69.2	63.1

Table 2. The Optimized Algorithm Compares the Test Results

In the process of setting up the mental health program of college students, we have been adhering to the traditional fixed mental health rules. So, after the completion of multi-channel stress management intervention technical system construction, we put the program into a key discipline. The above table has fully demonstrated the advantages of the program. In order to maintain this advantage, the program is applied to other subjects in this high school. Then a multi-channel stress management intervention system is selected for college students' mental health information. At the same time, the information is checked at the same time. The residual performance is looked at that it shows. After we put it into other disciplines, we can compare the results of the next final exam. We will not do it in groups this time. The program will be fully implemented in other subjects in the middle school. The contrast program is a weighted score of the school's students' past performance. Over a period of several months, it is found that the results of the centralized spot check ate among the results. The advantage of the program has been continued. The effectiveness model based on computer data has achieved practical success and improved the comprehensive score of the students of the school by 8.3 percentage points. In such a short period of time, it can be able to achieve such a significant positive effect which demonstrates the feasibility and success of this multi-channel stress management intervention technical programme.

The specific data model node is given, made as shown in the results. It can be seen that after the impact of the traditional old-fashioned and boring teaching mode, students do not need to seriously change themselves. Only according to the design scheme

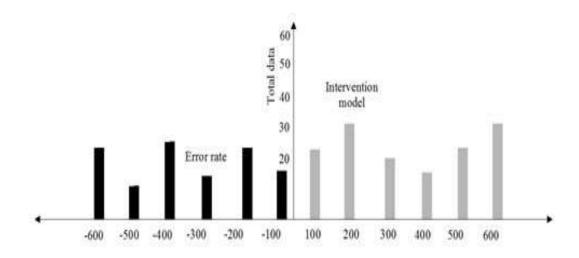


Figure 3. The Self media test compares results

of the route, students can make progress in performance but also to let students make full use of the learning time variable. In the context of the control process, the students' learning enthusiasm and learning efficiency can be mobilized. This fully demonstrated the reliability of the program. To observe, in this experiment we found that the overall grasp of the feedback questionnaire of university students mental health and participation, can ensure the accuracy and efficiency of mental health in the root. In the further accurate pose determination of process parameters, we use three-line translation theories. The pose of the prior art can be achieved by the calculation results, and then use to determine the value of the optimal three-line translation theory. Then the calculation will be able to complete the final task of mental health education. At the same time, in the process of collecting the questionnaire, we should use the replacement variables. By using the calculation method of the variables to ensure the method is rigorous and feasibility. We will be part of the data to the form of interception down, as shown in Table 3.

Mental health factor	Mentality	Mental health	teaching effectiveness	
achievement	31	40	8	79
Life	29	30	12	71
Total	60	70	20	150

Table 3. Data Mining Technology Building Model Testing

At the same time, in the process of testing, in view of this new terminal data algorithm, the research statistics of each node is carried out. The multi-channel pressure management intervention technology model fully embodies the purpose of high efficiency design. Its overall performance of data processing ability is more superior. The use of multi-way pressure management intervention technology terminal infiltration technology can improve each data. By receiving the data in cross-platform mode and integrating the effective scheme, a new effective scheme running system is developed especially in the mental health textbook and the student individual link establishment aspect, through the data analysis method, collects the student information. The information data of each intervention scheme are extracted from each system, and the basic information of each intervention scheme is analysed.

## 5. Conclusion

With the popularization of computer technology in our country, the traditional teaching mode has been gradually replaced by it.

The traditional mental health teaching is inefficient and the materials are old. On this basis, the research and development of a set of psychological health reform of college students can fundamentally change the situation. Based on large data mode approach to stress management intervention technology study of college students' mental health model, this article on the technology and way of thinking for our country education system provides a set of practical feasible theory practice. Therefore, in the process of constructing mental health system model, this paper makes reference to the existing optimization solution algorithm, which can make the optimization solution further in the option of screening through multi - path pressure management intervention technology, so as to guarantee students 'ultimate efficiency in the course of course learning and experience. With the help of multi-way stress management intervention technology companies and multi-channel stress management intervention technical effectiveness of ports, we added the target in the background material and improved it, finally it is put into use, for students to learn. Through the cross-platform mode to receive data and integrate the psychological teaching plan, a new teaching scheme operation system was finally developed. In this process, for the great teaching material distribution data of systemic integration capability and late for each of the students' psychological status of retest, we still cannot reach the best ideal effect and it needs further effort.

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