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Retraction

Retracted: The Construction of Smart Chinese Medicine Cloud Health Platform Based on Deep Neural Networks

International Transactions on Electrical Energy Systems

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This article has been retracted by Hindawi, as publisher, following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of systematic manipulation of the publication and peer-review process. We cannot, therefore, vouch for the reliability or integrity of this article.

Please note that this notice is intended solely to alert readers that the peer-review process of this article has been compromised.

Wiley and Hindawi regret that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

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[1] Y. Miao and Y. Zhou, "The Construction of Smart Chinese Medicine Cloud Health Platform Based on Deep Neural Networks," *International Transactions on Electrical Energy Systems*, vol. 2022, Article ID 6751915, 10 pages, 2022.

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Research Article

The Construction of Smart Chinese Medicine Cloud Health Platform Based on Deep Neural Networks

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In order to improve the efficiency of doctors' diagnosis and treatment, the state has built a Chinese medicine cloud health platform. However, most medical institutions currently use internal networks, and the technical standards and specifications are not uniform. Some information is not compatible and patient information cannot be shared. Therefore, the construction of a smart traditional Chinese medicine (TCM) cloud health platform based on deep neural networks has become a current research hotspot. The research results show that the deep neural network technology has a theoretical basis and feasibility in the smart Chinese medicine cloud health platform. Combining with deep neural network technology, a cloud-based Chinese medicine cloud health system has been developed through big data analysis technology. Through the investigation and research method, this paper found that the smart Chinese medicine cloud health platform based on deep neural networks was more popular with citizens, which could improve the quality and efficiency of management. The average management quality of a smart TCM health cloud platform based on deep neural networks was 81.1, and the average management quality of a common TCM cloud health platform was 75. The efficiency of the smart Chinese medicine cloud health platform based on deep neural networks was relatively stable, with an average of 84%. The efficiency of the general TCM cloud health platform fluctuated significantly and was relatively unstable, with an average of 73.5%. The efficiency of the smart Chinese medicine cloud health platform was 10.5% higher than that of the ordinary Chinese medicine cloud health platform. This shows that the construction of the intelligent Chinese medicine cloud health platform under the deep neural network is relatively successful.

1. Introduction

In recent years, the development of deep neural network algorithms has gradually adapted to reality. The technology is also becoming more and more mature, which provides an effective way for the construction of a smart Chinese medicine cloud health platform. Due to people's bad habits of life and diet, changes in disease types and other factors have had a huge negative impact on people's health. People's health needs have shifted from traditional curative to preventive. Therefore, the introduction of deep neural networks into the construction of a smart Chinese medicine cloud health platform has become a top priority.

In order to make the research on the construction of a smart Chinese medicine cloud health platform based on deep neural networks more scientific and rigorous, many researchers have invested in the research. Fan believed in developing intelligent medical systems so that medical care could process changes in chemical and physiological states in real time [1]. Raja's research discovered an early form of "smart medicine" that has been used in space to assess nutrition [2]. Based on the research on the development strategy of TCM informatization, combined with the current cloud computing development model, Xu analyzed the advantages of TCM informatization under cloud computing environment and how to use cloud computing technology to realize TCM informatization [3]. Zaszczyńska A believed that the traditional Chinese medicine health cloud could combine the standardization of traditional Chinese medicine with big data and artificial intelligence [4]. Based on the urgent needs of the aging population for TCM health cloud and health care services, Jin constructively studied the TCM health cloud service platform and its architecture design [5]. Singh analyzed the key technologies of the TCM health cloud platform, and then proposed the design and application of the TCM health cloud in healthcare services [6]. Liu combined the wisdom of traditional Chinese medicine with the Internet and big data. The real-time health status of the elderly was dynamically tracked and queried, which provided timely, effective, and targeted health care services for the elderly [7]. It can be seen that the research results on the TCM cloud health platform have been very rich. However, the research results on the construction of a smart TCM cloud health platform based on deep neural networks are very rare. In order to solve this problem, this paper combines the two to conduct research.

Many researchers are working on algorithms for learning deep neural network architectures. Foad discussed some modifications and extensions to convolutional and fully connected layer accelerators for deep learning networks [8]. Guo described activation encodings that were considered invalid, encodings with different memory overhead and energy properties [9]. Suk proposed to use some degree of indirection when accessing activations from memory to reduce their memory footprint by storing only valid activations [10]. Banerjee proposed a modified organization of activation programs that were considered ineffective when their detections could be obtained from memory. It was different from the original design where they were detected in the output of the previous layer [11]. Khodayar described the use of low-dimensional vector representations of sentence acoustics to control the output of a feedforward deep neural network text-to-speech system sentence by sentence [12]. Ji believed that the vector representations of sentences in the training corpus were learned together with other parameters of the model during network training [13]. Wang argued that deep neural networks were trained frame-by-frame, but the standard frame-level input parameters representing language features were complemented by features from projection layers. These parameters were jointly optimized with standard network weights [14]. In order to better study the TCM cloud health platform, this paper introduced the deep neural network into the construction of the TCM cloud health platform.

With the help of deep neural network technology, traditional Chinese medicine has finally formed a health management platform based on traditional Chinese medicine. This paper studied the construction of a smart TCM cloud health platform based on deep neural networks. Through research, it is found that the smart Chinese medicine cloud health platform based on the deep neural network is more popular among citizens, which can improve the quality and efficiency of platform management.

2. Smart TCM Cloud Health Platform Based on Deep Neural Network

2.1. Development of Neural Network. The development of neural networks includes perceptrons, multilayer perceptrons, deep neural networks, and convolutional neural networks.

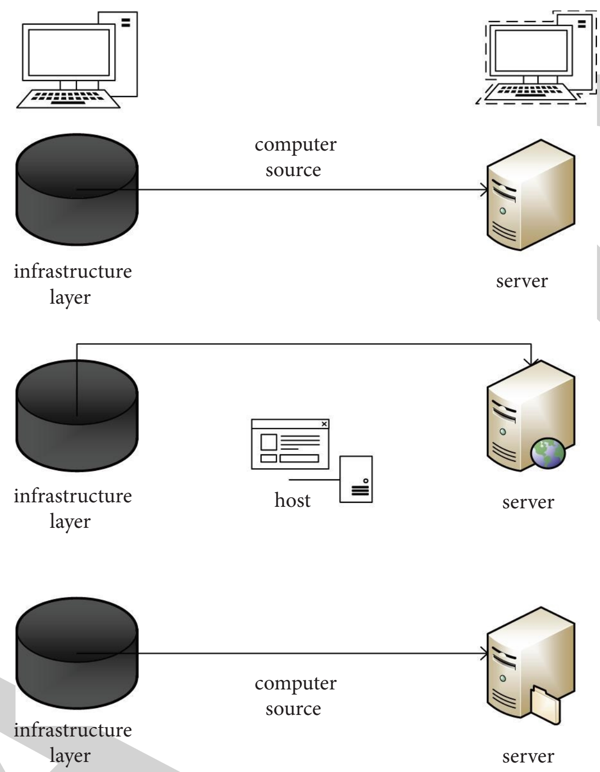

Figure 1: Network architecture based on deep neural network algorithms.

2.1.1. Perceptron. Neural network technology originated in the 1950s and 1960s when it was called a perceptron with an input layer, an output layer, and a hidden layer [15]. The input feature vector is transformed to the output layer through the hidden layer, and the classification result is obtained at the output layer.

2.1.2. Multilayer Perceptron. A multilayer perceptron, as the name suggests, is a perceptron with multiple hidden layers. Multilayer perceptrons can discard the original sequence of discrete transfer functions and use continuous functions to model neuron responses to stimuli. The continuous BP algorithm is used in the learning algorithm, which is now called the neural network [16]. Multilayer perceptrons solve previously unsimulated loopholes. At the same time, more layers make the network more capable of describing complex situations in the real world.

2.1.3. Deep Neural Network. The pretraining methods are used to reduce the local optimal solution problem. The hidden layer is pushed to 7 layers, and the neural network has a real "deep", thus kicking off the deep learning craze. Structurally, there is no difference between a fully connected deep neural network and a multilayer perceptron [17].

2.1.4. Convolutional Neural Network. In a fully connected system, the lower layer neurons and all upper layer neurons can establish connections. The biggest problem is the scaling

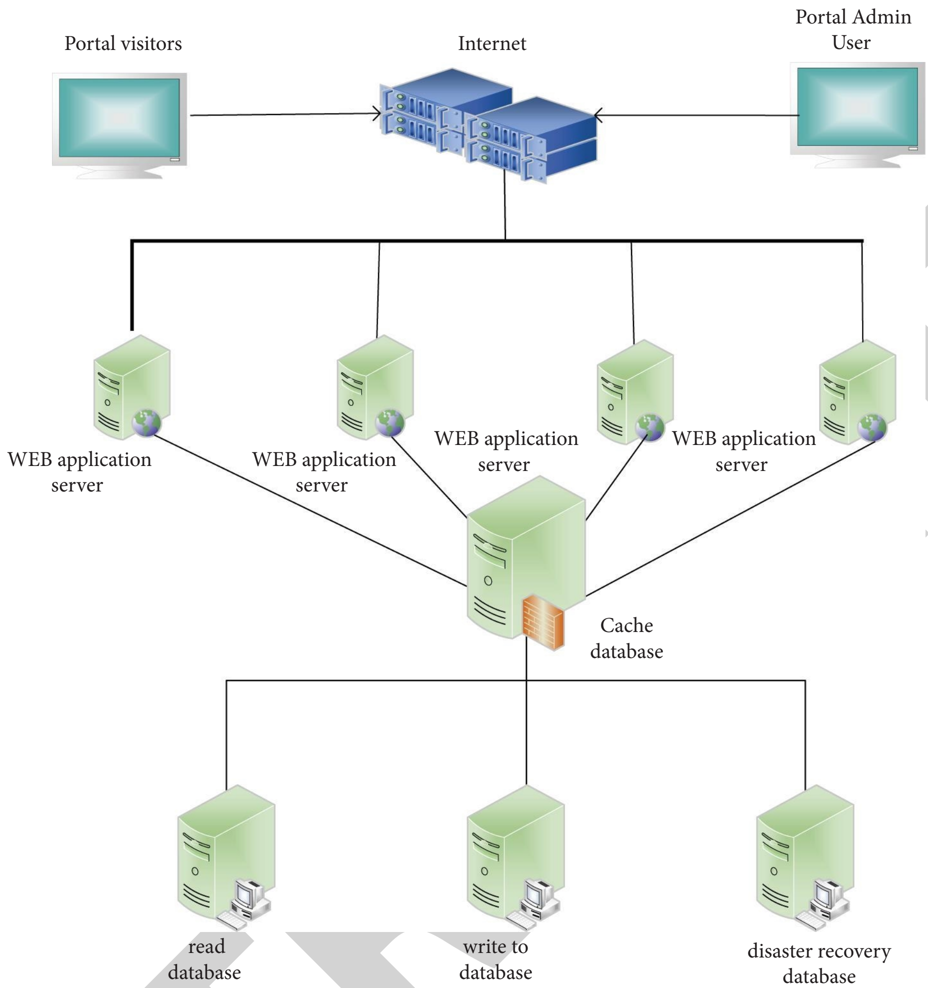

Figure 2: Traditional Chinese medicine cloud health platform architecture.

of the number of parameters [18]. Not all neurons in the upper and lower layers can be directly connected; they must go through "convolution" as an intermediary. The same convolution kernel is distributed in all images, and the images maintain the original positional relationship after the displacement operation. Following the same idea of using local information in the context of speech, neural networks can also be used for speech recognition. In a fully connected network or a deep neural network, the signals of neurons in each layer can be passed to the upper layers. Each time the sample is processed independently, it is also called a relay neural network. Specifically, as shown in Figure 1.

2.2. Architecture of TCM Cloud Health Platform. The traditional Chinese medicine cloud health platform is a family-based health management platform that can effectively realize the docking of cloud application platforms such as electronic medical records and information systems. The TCM cloud health platform can effectively manage personal and family health files for ordinary users and record the physical data of individuals and family members [19, 20]. It is also able to search for hospitals and clinics online and select the right doctor for an appointment or online consultation. Moreover, it can also self-diagnose healthily and inquire about the electronic medical records of individuals and family members. At the same time, it can interact with other ordinary users or doctors in the area, or send prescriptions to pharmacies to buy drugs online [21]. As a result, a new business model of "doctor-patient company" is formed, as shown in Figure 2.

2.3. Main Functions of the TCM Cloud Health Platform. The TCM cloud platform can provide four types of users, namely ordinary users, doctors, enterprises, and platform management.

Among them, ordinary users have applications such as finding personal health records, managing family health records, finding hospitals and doctors online, obtaining hospital and doctor information, online appointment registration, online consultation, online doctor communication, and online drug purchases. It is also possible to score doctors or send pennants [22, 23].

Doctor users can obtain patient registration information and consultation information online. They are able to interact with patients online, post updates, publications, release patented medicines, and analyze revenue statistics.

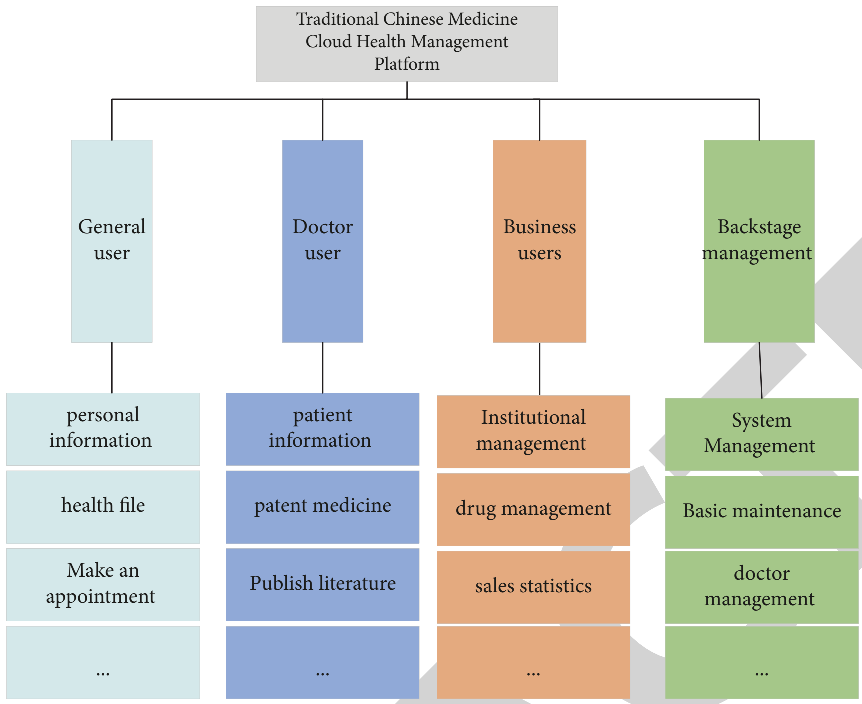

Figure 3: Main functions of TCM cloud health platform.

Finally, combined with the doctor's workstation, they diagnose diseases for patients, identify diseases, do electronic medical record storage, health file storage, and so on. At the same time, the doctor's diagnosis and treatment plan system includes patient diagnosis, disease identification, treatment and Western medicine prescription, viewing medical records, printing medical records, searching treatment records, and symptom comparison analysis.

Enterprise users can build their own online stores on the platform, publish drug information online, manage drug inventory, and conduct statistical analysis of sales data. The online and offline O2O business model is then realized.

Platform management is to manage each subplatform. Specifically, as shown in Figure 3.

3. Applications of Deep Neural Network Algorithms in Smart Chinese Medicine Cloud Health Platform

Deep neural networks originated from neuroscience techniques. In recent years, this technology has achieved successful breakthroughs in many fields of artificial intelligence. Deep neural networks are also known as deep learning. Since current deep networks mainly use convolutional structures, deep neural network algorithms are sometimes also referred to as deep learning algorithms.

Deep neural networks (DNN) are the foundation of many artificial intelligences at present, and DNN has achieved breakthrough success in speech recognition, image recognition, etc. Feedforward artificial neural networks (CNN) have been widely used in the computer field. In traditional nonlinear networks, object extraction and object selection are first performed on the image, and then the network is output. CNN is an end-to-end network that directly takes raw images as network input and automatically performs feature training. Taking the recognition task as an example, CNN integrates the extraction feature selection and classification, and the final matched category is output.

The CNN network structure is mainly composed of three types of layers: convolutional layers, pooling layers, and fully connected layers. The specific structure of the CNN network is shown in Figure 4.

Compared with traditional neural networks, CNN has the characteristics of local coverage and density distribution. The connections between neurons are local connections instead of full connections, and the connection weights of neurons between layers are shared by parameters. This feature greatly reduces the weight value parameters and computational density of neural connections, thereby reducing the computational cost complexity, and makes it possible to study the training of deep convolutional networks.

3.1. Convolutional Layer. The convolutional layer is the most important structure in the CNN network, and the convolutional layer generally contains a convolution kernel. Features are extracted from the convolution kernel, and multiple feature maps are output by inputting a two-dimensional image, which is expressed as follows:

$$b_m^k = f_k\left\{\sum_{n\in m} b_n^{k-1} * \varpi_{n,m} + y_n^k\right\}. \tag{1}$$

Among them, b_m^k represents the m-th feature vector of the k layer, and the output feature size is expressed as follows:

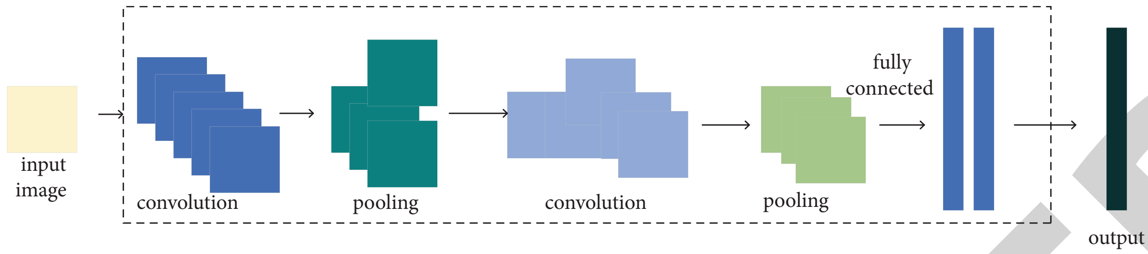

Figure 4: The CNN network structure.

$$k_{out} = \left\lfloor \frac{k_{im} + 2q - l}{c} \right\rfloor - 1. \tag{2}$$

3.2. Pooling Layer. This architecture can make it easier to import some parts of the transformation, with some translational fixity. After going through the pooling layer, the resulting value is related to the general statistical features of the input region but not to the position of a single feature, which is expressed by the Formula:

$$b_k = \left[\max\left(a^1\right), \max\left(a^2\right), K\max\left(a^l\right)\right]_m. \tag{3}$$

Among them, $^{m}_{\max}$ represents the feature vector of the weight context.

3.3. Fully Connected Layer. Each fully connected neuron is connected to all the neurons in the previous layer. Therefore, the amount of parameters is huge, and the last layer or layers of CNN are fully connected layers.

The output formula of neurons in the fully connected layer is shown as follows:

$$b_m^k = f_k\left\{\sum_{n-1}^{k-1} b_n^{k-1} * \varpi_{n,m}\right\} + y_n^k. \tag{4}$$

3.4. Activation Function. The results of convolutional layers and fully connected layers generally need to go through an activation function. The functions in the convolutional and fully connected layers are linear function operations. In order to make the network nonlinear and increase the fitting ability of the network to handle complex functions, it is also necessary to add an activation function after the convolution and fully connected layers to perform nonarbitrary transformations.

The activation function usually has three distribution curves, which are expressed by the Formulas:

$$\begin{aligned} f(x) &= \frac{1}{1 - o^{-b}}, \\ f(x) &= \frac{o^b - o^{-b}}{o^b + o^{-b}}, \\ f(x) &= \max(b, 0). \end{aligned} \tag{5}$$

In the process of training a neural network, a decay function is used in the forward pass to calculate the difference between the predicted value and the actual symbol. In backpropagation, the decay function is used to update the weight by taking the partial derivative of the parameter (weight). The calculation formulas are expressed as follows:

$$s_h^k = \sum_l v_l^k b_l^{k-1} + y, \tag{6}$$

$$b_l^k = \frac{o^2}{\sum_l o^2}. \tag{7}$$

When the sum of the outputs of all neurons in the layer l is equal to 1, that is

$$\sum_{h=1}^{l} b_l^k = 1. \tag{8}$$

When the formula does not consider the regular term, the calculation formula is shown as follows:

$$C = \frac{1}{n}\left[\sum_{i=1}^{n}\sum_{h=1}^{l} 1\,(n \in 1)\right]. \tag{9}$$

3.5. Stochastic Gradient Descent Function. It can be seen from calculus that when w changes to a small increment, the increment of the loss function can be completely expressed by calculus, which is expressed as follows:

$$\Delta C = \frac{\partial C}{\partial w_i}\Delta w_i + \frac{\partial C}{\partial w_2}\Delta w_2 + \ldots + \Delta w_i. \tag{10}$$

ΔC can be expressed as follows:

$$\Delta C = \left(\frac{\partial C}{\partial w_i}\right)\Delta_w. \tag{11}$$

If the formula is expressed as follows:

$$\Delta w = \eta \Delta C. \tag{12}$$

Then the formula is obtained

$$\Delta C = -\eta \|\nabla C\|^m. \tag{13}$$

Since ΔC is also called the gradient of the loss function C, this method is also called gradient descent. By replacing w with the bias of the weight v in the deep neural network, the update function of the weight bias can be obtained, which is expressed as follows:

$$v = v - \eta \frac{\partial C}{\partial v}, \tag{14}$$

$$y = y - \eta \frac{\partial C}{\partial Y}. \tag{15}$$

However, the sample sets for training deep neural networks tend to be very large. If all samples are input during training, the calculation of the average can take a lot of time, which makes the results very slow. When all samples are used up, one training iteration is completed. Then, the second iteration is started in the same way, and so on, until the loss function converges, which is expressed by the Formulas

$$\nabla C = \frac{1}{n} \sum_{i=1}^{n} \Delta C - \frac{1}{M} \sum_{i=1}^{N} \Delta C, \tag{16}$$

$$\ell_h^i = \sum_{i=1}^{n} \frac{1}{m} \Delta C. \tag{17}$$

The algorithm takes into account the change period of the parameters, so a higher convergence speed can be obtained under the stochastic gradient algorithm.

$$\Delta v = \sum_{m} \eta \frac{\partial C}{\partial M}. \tag{18}$$

When training a convolutional neural network with gradient descent, the partial derivatives of the weighted objective function need to be calculated. The algorithm that calculates the part of the objective function relative to the weighted input, studies the regression formula of the convolutional layer and the fully connected layer through the statistical graph and then studies how the accumulation layer receives and releases.

4. Construction Characteristics of TCM Cloud Health Management Platform

According to the core links and management characteristics of TCM health management, a TCM cloud health management platform is built, as follows:

(1) Acquisition of health status parameters: Four diagnostic instruments and an electronic nose are used to understand and collect application information related to traditional Chinese medicine. The research and development of the application can more effectively ensure the objectivity and integrity of the four diagnostic research information. The data collected by wearable devices are real-time and dynamic and can be included in the collection range. Biochemical and genetic indicators in parametric chemical analysis that can be obtained by the deep neural network technology are part of microscopic parameters and are also important factors in determining health status.

(2) Arrangement of health files: The obtained parameter information is uniformly entered and stored in the health and medical management information system. Everyone receives a unique file archive. A health file includes an individual's general condition, including current health conditions, medical history, lifestyle, family history, recent donor visits, laboratory tests, and many health risks in work and life. Health risk factor data can be monitored and collected in real time. By running on this data in real-time, a huge amount of data can be obtained. The big data technology can be transmitted and stored in the cloud to form a personal health database, which provides targeted prevention information and guidance for everyone.

(3) Health status assessment: The collected parameter attributes are based on the identification of status genes. Through data mining technology, machine learning, artificial neural network, and other information processing systems, an algorithm model that conforms to the thinking of traditional Chinese medicine is established, and a path from parameters to state judgment is developed and formed.

(4) Risk warning and intervention adjustment: Chronic lifestyle disease is a long-term accumulation process that combines many health risk factors. Health risk factors are added to the health record, and long-term, comprehensive, and dynamic care for these risk factors is undertaken. Through massive data models, individual and group health risks can be assessed and risk prediction warnings are made.

(5) TCM health manager: TCM is the core of the TCM health management platform. In addition to collecting information, operating systems, etc., it also plays the task of managing platform objects (control objects) to communicate with each other. Health lectures are issued for individual guidance of multidisease and high-risk groups, and the purpose is to monitor the whole process and all-round health.

At present, the basic structure of the traditional Chinese medicine health management system based on the overall, dynamic, and personalized has been developed. The system has preliminarily realized: macro, medium, and micro health status indication parameters collection; human-machine combined semiautomatic three-level diagnosis of TCM syndrome elements, syndrome types, and diseases; automatic optimization and fuzzy matching of self-help intervention programs such as medicated diet, diet therapy, and ointment; generation of personalized health status assessment and intervention reports and other functions. With the continuous improvement and development of theory and technology, TCM health management plays a greater role in human health.

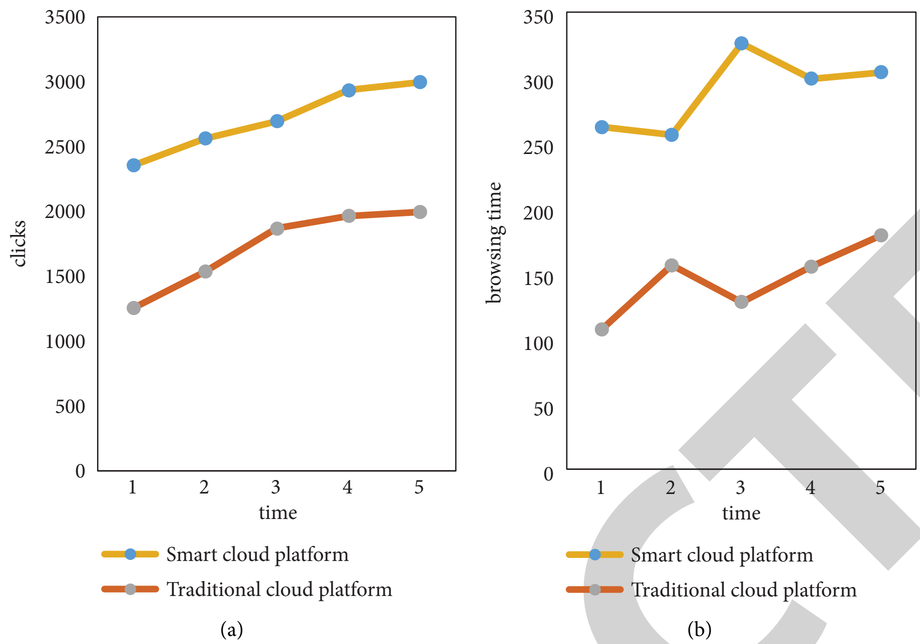

Figure 5: Comparison of clicks and browsing time of TCM cloud health platform. (a) Comparison of platform clicks. (b) Platform browsing time comparison.

5. Experiments Related to the Construction of a Smart Chinese Medicine Cloud Health Platform Based on Deep Neural Network

5.1. Comparison of Clicks and Browsing Time of TCM Cloud Health Platform. The smart Chinese medicine cloud health platform based on the deep neural network conducts a 6-week click comparison in the background. It is compared with the traditional Chinese medicine cloud health platform, and the changes in the number of clicks and browsing time of the two are observed. The results are shown in Figure 5.

In Figure 5, Figure 5(a) is the test result of platform clicks, and Figure 5(b) is the test result of browsing duration. In Figure 5(a), the clicks of the smart TCM health cloud platform based on the deep neural network were significantly higher than that of the ordinary TCM health platform. The number of hits of the smart Chinese medicine health cloud platform based on a deep neural network was basically more than 2200, and there was a clear upward trend. The number of hits on the ordinary Chinese medicine health platform increased from 1256 to 1996, but it was still significantly lower than that of the smart Chinese medicine health cloud platform based on the deep neural network. In Figure 5(b), it can be clearly seen that the browsing time of the smart Chinese medicine health cloud platform based on the deep neural network was higher than that of the ordinary Chinese medicine health platform. The total browsing time of the smart Chinese medicine health cloud platform based on a deep neural network was 1447 minutes. The total browsing time of the general Chinese medicine health platform was 725 minutes. To sum up, the smart Chinese medicine health cloud platform based on a deep neural network is more popular.

5.2. Platform Registration Test. Signups for both platforms were statistically tested to see how the two platforms differed in weekly signups over a 6-week period. The test statistics only record users who have registered with real names and browsed for more than 15 minutes, and those who browsed for less than 15 minutes are not recorded. The test results are shown in Figure 6.

In Figure 6, Figure 6(a) is the statistical result of the registered number of the smart Chinese medicine health cloud platform based on the deep neural network. Figure 6(b) shows the statistical results of the number of registrants of the general TCM health platform. In Figure 6(a), the total number of registrations for the six weeks was 1180, and the highest week 5 reached 286 registrations. The minimum number of sign-ups was week 1, with 127 sign-ups. In Figure 6(b), the number of registrations was significantly less than that of the deep neural network-based smart Chinese medicine health cloud platform. The total number of registrations for 6 weeks was 486, and the highest was only 102 registrations. This showed that the smart Chinese medicine health cloud platform based on a deep neural network was more attractive to people.

5.3. Comparison of Platform Satisfaction. In order to more clearly test whether the smart Chinese medicine health cloud platform based on the deep neural network can make the citizens more satisfied, 8 citizens who have used the two platforms were randomly searched for satisfaction scores, with a full score of 10. The survey results are shown in Table 1.

In order to more intuitively study the degree of public preference, this paper draws the survey results as shown in Figure 7.

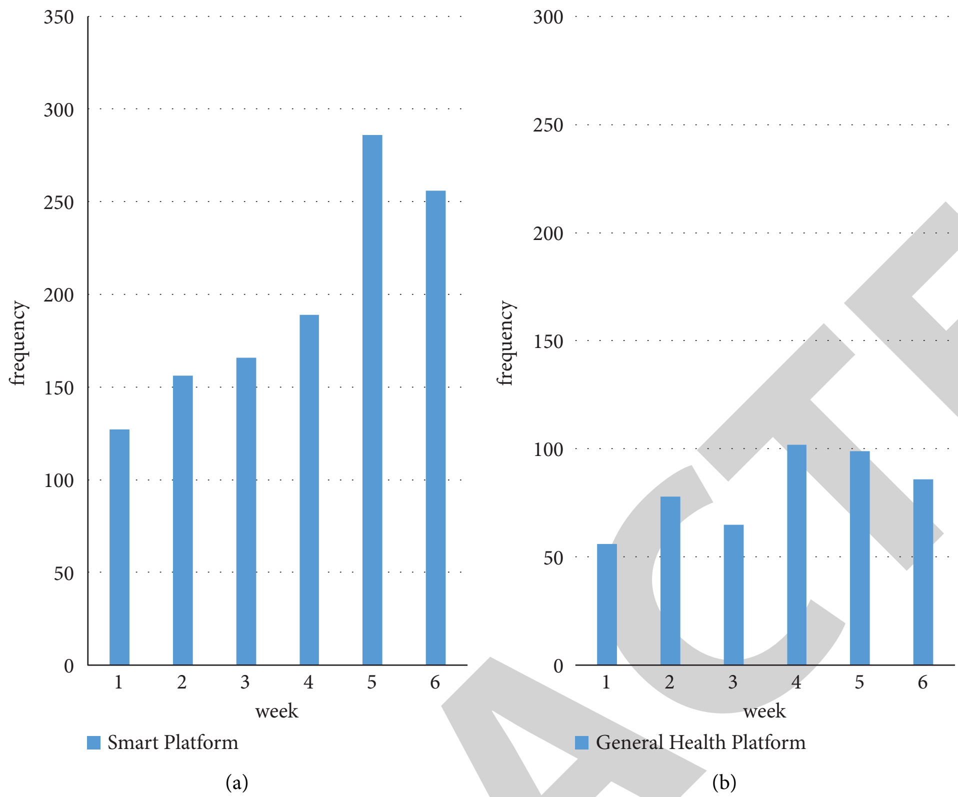

FIGURE 6: Comparison of registered numbers of TCM health platforms. (a) Number of registered smart health platforms. (b) General health platform registrations.

In Figure 7, Figure 7(a) is the statistics of citizens' scores, and Figure 7(b) is the comparison of the satisfaction of the two groups of platforms. In Figure 7(a), citizens scored the highest at 8.5 and the lowest at 6.9. Combined with Figure 7(b), the satisfaction rate increased from 52% to 85%, and the satisfaction rate increased by 33%. In Figure 7(b), the citizen's highest score was 8.1, and the lowest score was 6.3. To sum up, the construction of the smart Chinese medicine health cloud platform based on a deep neural network is still more popular among citizens.

TABLE 1: Satisfaction scores of the two platforms.

	Smart health TCM platform	General health TCM platform
1	6.1	6.9
2	7.2	6.3
3	8.1	7.2
4	8.4	7.5
5	7.9	7.4
6	7.8	7.0
7	8.2	8.1
8	8.5	8.1

5.4. Comparison of Platform Management Quality and Efficiency. During the experiment of the two groups of platforms, the most important improvement of management quality and efficiency is to observe the comparison of management quality and efficiency of the two groups of platforms within 6 weeks. The statistical results are shown in Figure 8.

In Figure 8, Figure 8(a) is the comparison result of the management quality of the two groups of TCM cloud health platforms. Figure 8(b) is a comparison of the efficiency of the two groups of TCM cloud health platforms. As can be seen from Figure 8(a), the management quality of the smart TCM cloud health platform from the 3rd to the 6th week showed a linear upward trend, reaching a maximum of 88. There were still fluctuations in the first and second weeks and management needed to be strengthened. The average management quality of the smart Chinese medicine health cloud platform based on a deep neural network was 81.1. The management quality of the general TCM cloud health platform showed an upward trend from the first week to the fourth week. However, from the fifth week onwards, the management quality was unstable, the highest was 80, the lowest was 69, and the average management quality was 75. It can be seen from Figure 8(b) that the efficiency of the smart TCM health cloud platform based on the deep neural network was significantly higher than that of the ordinary TCM cloud health platform. The efficiency of the smart Chinese medicine cloud health platform was relatively stable, with an average of 84%. The efficiency of the general TCM cloud health platform fluctuated significantly and was relatively unstable, with an average of 73.5%. The efficiency of the smart Chinese medicine cloud health

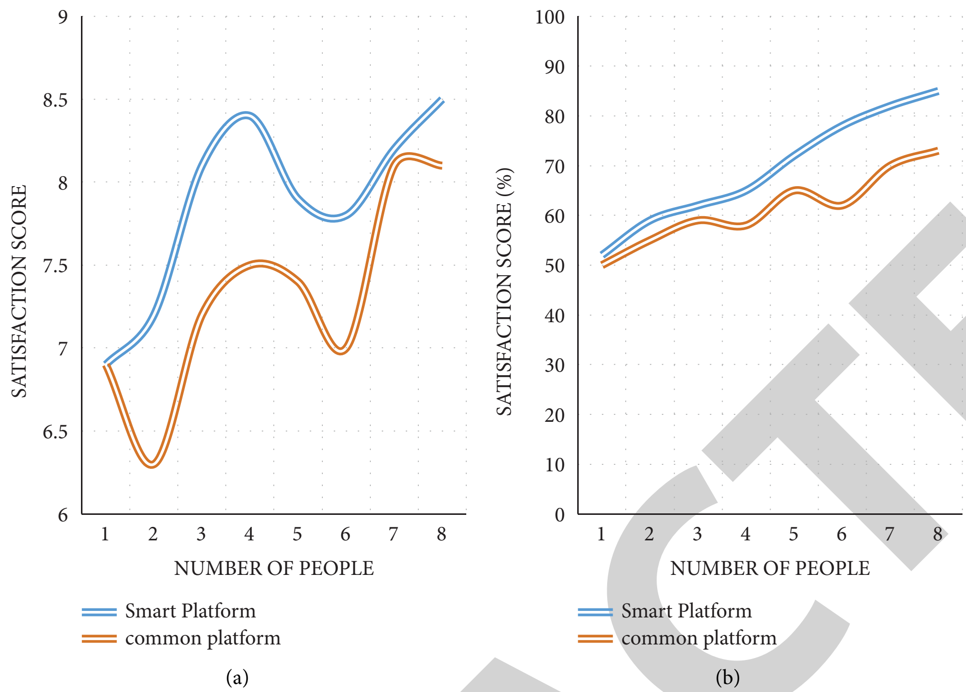

Figure 7: Comparison of satisfaction of TCM health platform between two groups. (a) Satisfaction scores of the two platforms. (b) Satisfaction comparison between the two platforms.

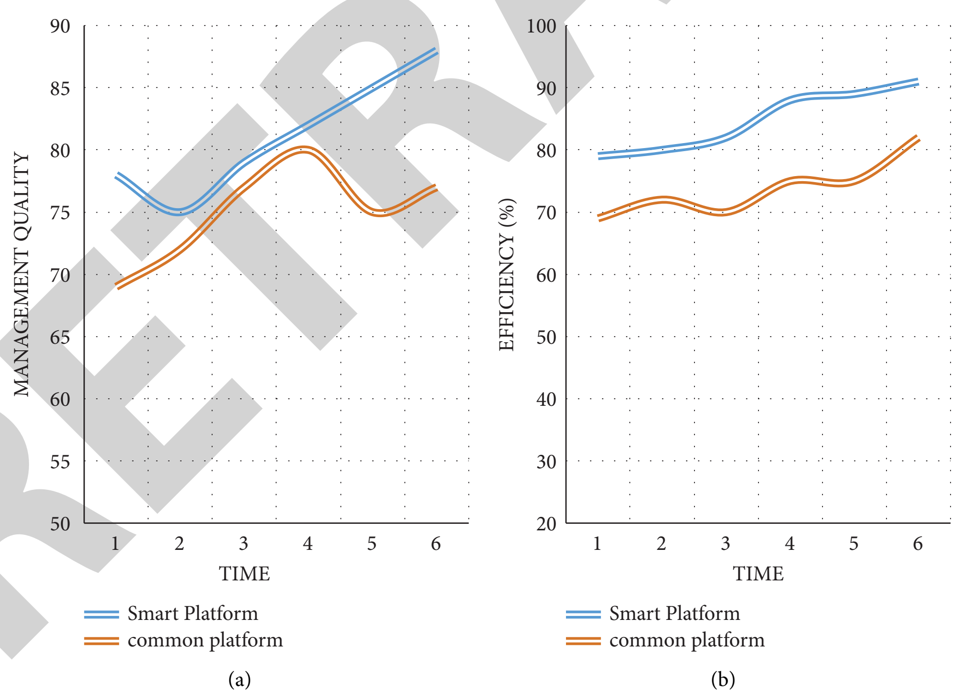

Figure 8: Comparison of platform management quality and efficiency. (a) Platform management quality (b) Platform efficiency.

platform was 10.5% higher than that of the ordinary Chinese medicine cloud health platform. This showed that the construction of the intelligent Chinese medicine health cloud platform based on a deep neural network was relatively successful.

6. Conclusion

With the rapid change in society, the improvement of living standards, and better living conditions, people gradually pay more and more attention to the concept of self-care. There is also a trend in preventive medicine. Therefore, the concept of self-examination has gradually formed in the minds of the masses. With the help of "deep neural network" technology, through cloud computing, and other technical means, a cloud health platform for smart traditional Chinese medicine, and a self-service platform for health management based on traditional Chinese medicine, have finally been formed. The study found that the smart Chinese medicine health cloud platform based on a deep neural network is more popular with citizens than the ordinary Chinese medicine cloud health platform. The management quality and efficiency have been improved, and a "new smart Chinese medicine cloud health management model" has been formed.

Data Availability

Data sharing not applicable to this article as no datasets were generated or analyzed during the current study.

Conflicts of Interest

The authors declare that they have no conflicts of interest with any financial organizations regarding the material reported in this manuscript.

Acknowledgments

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