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Retraction

Retracted: Artificial-Intelligence-Based Fuzzy Comprehensive Evaluation of Innovative Knowledge Management in Universities

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

(1) Discrepancies in scope
(2) Discrepancies in the description of the research reported
(3) Discrepancies between the availability of data and the research described
(4) Inappropriate citations
(5) Incoherent, meaningless and/or irrelevant content included in the article
(6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets 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 own 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] R. Liu and H. Zhang, "Artificial-Intelligence-Based Fuzzy Comprehensive Evaluation of Innovative Knowledge Management in Universities," *Mathematical Problems in Engineering*, vol. 2022, Article ID 5655269, 11 pages, 2022.

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Research Article

Artificial-Intelligence-Based Fuzzy Comprehensive Evaluation of Innovative Knowledge Management in Universities

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By considering the comprehensive impact index ranking of all factors to identify the impact of university innovation knowledge, the group decision-making characteristic root method, decision-making experiment, and evaluation laboratory method are used to analyze the factors that affect the university's innovative knowledge management ability. The key factors affecting management capabilities have been identified and reviewed to establish measures to enhance the innovative knowledge management capabilities of colleges and universities. Using artificial intelligence-based knowledge management fuzzy evaluation algorithm evaluation model to evaluate the innovation knowledge management of 16 universities, the results obtained are consistent with the actual evaluation results of the year; this result proves the fuzziness of university innovation knowledge management, which is based on artificial intelligence fuzzy. The algorithm is evaluated. The results show that the evaluation model is feasible.

1. Introduction

With the continuous development of the economy and the innovation of science and technology, countries are competing in terms of innovative talent. Countries worldwide wish to inculcate talent. Since the beginning of the 21st century, the scale of higher education development has grown rapidly. The number of college graduates has increased rapidly each year, and the demand for the employment of university graduates is extremely large [1–3]. In recent years, the application of high-level technologies such as artificial intelligence in the industrial domain and society has gradually reduced the demand for labour [4]. In such a situation, colleges and universities should focus more on innovation and entrepreneurship in addition to basic professional skills. However, the self-development in universities is constrained by various factors, and considerable challenges are incurred in shaping the innovation and entrepreneurship capabilities of college students. Compared with other colleges and universities, private colleges require more support to foster innovation and entrepreneurship. With the rapid development of higher education along with the slow growth of economic development and the imbalance between the supply and demand, students, schools, and even the governments are under considerable pressure [5].

There are many types outside the definition of innovative knowledge in colleges and universities. Generally speaking, the definition of university innovation knowledge is a nonprofit independent research institution that focuses on policy research. It will directly or indirectly provide the government with various forms of services [6]. They are a special type of policy research and consulting institutions, and they are also important participants in the process of policy formulation and implementation. This definition of university innovation knowledge does not emphasize its independence. Although the working environment of university innovation knowledge in different regions of the country is very different, this concept can basically cover most different forms of university innovation knowledge [7]. This article also uses the concept of university innovation knowledge in this sense. Based on the definition and research background of university innovation knowledge, research is carried out around the evaluation of university innovation knowledge. The purpose of university innovation knowledge evaluation is to determine how university innovation knowledge influences the agenda in all aspects of policy formulation, implementation, and evaluation.

The rest of the sections of the paper are composed as follows: The second section is the research on the evaluation of innovation knowledge management in colleges and universities based on artificial intelligence. It reviews and evaluates the research status of the evaluation of innovation knowledge management in domestic colleges and universities and determines the research direction of this article based on the current research. The third part is the determination of evaluation model samples and indicators. The problem of fuzzy evaluation algorithm based on artificial intelligence is analyzed, and then the related fuzzy algorithm of knowledge management is analyzed, and the defects of the algorithm are explained. Finally, the fuzzy evaluation algorithm based on artificial intelligence is analyzed. A brief description was made. According to the research object, the evaluation system of university innovation knowledge is designed. The fourth part is the verification and application of the model's validity. The first is to analyze the model samples, then to identify and analyze the influencing factors, and finally to screen and analyze the key evaluation indicators based on artificial intelligence. The fifth part is conclusions and recommendations. Summarize and analyze previous research, make recommendations, point out the main contributions of this article, and point out the limitations and prospects of future research.

2. Related Works

In general, to evaluate the innovative knowledge in universities, most research scholars use quantitative evaluation methods, such as network measurement and literature surveys [8,9]. Research scholars assign notable importance to the relationship between mainstream media and innovative knowledge in universities when examining the evaluation systems [10]. Zeng advocates evaluating the ranking of universities in terms of the innovative knowledge based on the citation reports of mainstream media [11]. Elwakil and Zayed used the mainstream paper media to cite the number of reports on college innovative knowledge, ranked the innovative knowledge of colleges and universities, and proposed the consideration of the influence of college innovative knowledge on government policy decisions in the evaluation of the college innovative knowledge [12]. The reference level of knowledge research, number of government hearings attended, and degree of participation in consultation were used as indicators, and regression analysis was performed to analyze the correlation among the factors and popularity of innovative knowledge in universities [13]. Tao evaluated the innovative knowledge of 66 colleges and universities by using mainstream media citation reports and number of government hearings and concluded that the ideologically neutral colleges and universities had a higher reputation and were more popular [14]. Lu's research focused on the innovative knowledge of universities in the field of economics [15]. The author ranked and evaluated the universities' innovative knowledge and college innovative knowledge experts according to mainstream media citation reports. In addition to the research on the evaluation system based on the citation of mainstream media, certain scholars explored other influencing factors and analytical methods for universities' innovative knowledge evaluation systems. For instance, several researchers centrally evaluated the innovative knowledge of Canadian colleges and universities in five popular areas and used the hyperlink analysis method to study the network influence of college innovative knowledge [16]. Samarkand conducted a ranking study on the innovative knowledge of 20 universities in the United States based on social networks, external links, and network visits [17]. Yu used the literature measurement method and weighted assignment technique to evaluate the innovative knowledge of universities in the field of meteorology [18]. Walczak used multiple indicators to perform a statistical analysis and evaluation of the innovative knowledge in universities in 34 developing countries [19]. Karaboga believed that impact, resource, and demand indicators must be considered in the evaluation of the corresponding influence [20].

Furthermore, many types of innovative knowledge exist beyond universities. In general, innovative knowledge in colleges and universities pertains to a nonprofit independent research institution that considered policy research a research focus and directly or indirectly provides various forms of services to the government. Such institutes represent a unique type of policy research and consulting agency are a key participant in the process of policy formulation and implementation. However, this definition of college innovative knowledge does not emphasize its independence. Although the working environment for innovative knowledge in universities in different regions of the country varies considerably, this concept covers most of the different forms of university innovative knowledge. Artificial Intelligence based research on evaluation of innovative knowledge management in universities.

3. Research on the Evaluation of Innovative Knowledge Management in Universities Based on Artificial Intelligence

3.1. Evaluation of University Innovative Knowledge. The knowledge value chain is an integrated model derived from the theory of multiple intelligences and other theories. This chain mainly includes three parts: knowledge input, knowledge activity, and knowledge output. The core idea is to gather knowledge through multiple channels. This knowledge is input to the knowledge base of colleges and universities, and the output is obtained in the form of multiple targets after four kinds of knowledge value-added activities [21]. After the integrated multivalue output, the organization can continuously feedback the knowledge source or knowledge activity process to implement a two-way knowledge-value-added evolution, and the knowledge value output chain with the upstream, middle, and downstream college organizations beyond the organization can be employed. Moreover, by splicing another larger knowledge value chain system, colleges and universities can integrate the value of knowledge and maximize the benefits. The knowledge value chain model (Figure 1) indicates that knowledge management can be interpreted as university resource management, that is, the process of knowledge collection, processing, expansion, innovation, and reconstruction is incorporated in the process of university value chain, and it is believed that competition plays a critical role in this process. Fully understanding and properly using the essence of the knowledge value chain can help comprehensively analyze the competitive advantages of knowledge management in colleges and universities and allow colleges to formulate knowledge management strategies in a targeted manner, thereby improving the core competitiveness of the colleges and universities.

Moreover, it is widely believed that knowledge management pertains only to colleges and universities. In fact, colleges and universities need knowledge management. Considering the rapid growth rate, accumulating empirical knowledge of college employees is crucial for the growth and development of colleges and universities. Knowledge management is the most suitable management system in the era of knowledge economy. This system involves specific laws of movement, and knowledge is circulated through acquisition, learning, sharing, application, and innovation. Therefore, suitable systems, management, technology, and culture are required to protect and ensure the constant rotation of knowledge. The knowledge management of colleges and universities must be evaluated along with innovations in new fields of science and technology. Through knowledge management, the three fields of individuals, universities, and society can be linked. Knowledge management is mainly an extension and development of information management, which is aimed at summarizing and organizing a large amount of information in a certain way to facilitate the search and retrieval of the information through computers, generation of knowledge through the information, and use of the knowledge to ensure greater benefits. Information management is the foundation of knowledge management, which is an extension of information management. Therefore, knowledge management in universities refers to not only the internal information resource management of colleges and universities but also the integration of the knowledge resources of the society and value generation in the society.

Under the background of knowledge economy, colleges and universities must implement novel concepts of scientific and technological innovation, effectively integrate these concepts with that of knowledge management, and establish the following knowledge management model: plan the strategic goals of scientific and technological innovation in universities according to the current status of knowledge management in the university; learn the organization structure; establish talent training institutions that provide high-quality scientific and technological innovative talent for colleges and universities; create a harmonious and unique college cultural atmosphere that facilitates the establishment of interpersonal relationships among college employees and effective communication and sharing; establish a knowledge incentive mechanism for university employees to innovate and transfer knowledge; build an advanced university information infrastructure and efficient management information system to provide material technology platforms and management methods for universities; establish a complete information feedback mechanism to help university administrators discover existing problems in time, promptly find a solution to the problem, and improve the university's market response capacity and overall competitiveness; promote the university's innovative activities; and enhance the university's growth and core competitiveness. The logic is shown in Figure 2.

3.2. Fuzzy Evaluation Model Construction. Information is a measure of systematic order, and entropy is a measure of the degree of disorder in the system. The system may have many different states [22,23]. When the probability of occurrence of each state is M_i $(i = 1, 2, \ldots, m)$, the entropy of the system can be expressed as a probability distribution function.

$$G = -k \lim_{n \longrightarrow \infty} \sum_{i=1}^{n} mi \ln M_i. \tag{1}$$

Therefore, the entropy weight method is an objective weighting method to measure the amount of information. Compared with subjective assignment methods, this method has a higher accuracy and stronger objectivity and can more clearly explain the obtained results. Assuming that n items must be evaluated considering m evaluation indicators, and the index feature vector H_{ij} represents the evaluation result of each evaluation object, the system corresponds to an index feature vector matrix of the order $n \times m$.

$$H = \begin{bmatrix} H_1 \\ H_2 \\ \cdots \\ H_n \end{bmatrix} = \begin{bmatrix} h_{11} & h_{12} & \ldots & h_{1m} \\ h_{21} & h_{22} & \ldots & h_{2m} \\ \cdots & \cdots & \cdots & \cdots \\ h_{n1} & h_{n2} & \ldots & h_{nm} \end{bmatrix}. \tag{2}$$

The standardization process is divided into positive and negative index standardization. This article uses positive index processing, for which a higher positive index value is more desirable. The positive index processing involves the following calculation:

$$T_{ij} = \frac{h_{ij} - \min\left\{h_{1j}, \ldots h_{ij}\right\}}{\max\left\{h_{1j}, \ldots, h_{ij}\right\} - \min\left\{h_{1j}, \ldots, h_{ij}\right\}}. \tag{3}$$

The coordinate translation of the standardized data is performed as

$$m_{ij}' = 1 + T_{ij}. \tag{4}$$

With the proportion of the index value of the i-th evaluation item under the j-th evaluation index, M_{ij} can be calculated as

$$m_{ij} = \frac{m_{ij}'}{\sum_{i=1}^{m} m_{ij}'}. \quad (5)$$

Moreover, the entropy value U_j and coefficient of variation of the j-th performance index can be determined as

$$\begin{aligned} U_j &= \frac{1}{\ln m} - \sum_{i=1}^{m} m_{ij}' \cdot \ln m_{ij}, \\ g_j &= 1 - U_j, \\ f_i &= \frac{g_j}{\sum_{j=1}^{n} g_j}, \\ B_i &= \sum_{j=1}^{n} g_j \cdot m_{ij}. \end{aligned} \quad (6)$$

In the comprehensive evaluation through the above-mentioned entropy weight method, the acquisition of the original data is critical. To render the data more objective and credible, this paper invites multiple experts to perform the scoring and comprehensively calculates the score of each indicator. A smaller information entropy of the influencing factors corresponds to a greater degree of variation in the influencing factors. Moreover, a larger amount of information provided corresponds to a greater role in the comprehensive evaluation process and larger corresponding weight.

3.3. Design of the Evaluation System of Innovative Knowledge in Universities. The processes of selecting the indicators, determining the evaluation methods, calculating the weights, and selecting and processing the learning samples for innovative knowledge evaluation in universities must follow certain principles. First, to evaluate the innovative knowledge in colleges and universities, an evaluation index system must be established [24,25]. The selection of the evaluation indexes notably influences the evaluation results. If many evaluation indexes are considered, the evaluation process will be highly cumbersome, and it may not reflect the issues that must be examined. In the evaluation process, the indicators are usually artificially selected. To minimize the randomness and irregularity in the process of selecting indicators, it is necessary to set certain basic principles to guide the selection of the indicators. In the process of index selection and determination, we must follow the principles of comprehensiveness, refinement, objectivity, and operability, combined with the use of objective data and subjective factors in the process of university innovative knowledge construction and operation. In this manner, one can list several indicators to be considered. The evaluation principles are presented in Table 1.

To construct the university innovative knowledge evaluation index system scientifically and rationally, it is necessary to strictly follow the evaluation system construction principles, based on the university innovative knowledge evaluation system case, system research, and related literature induction and expert consultation. The characteristics of innovative knowledge and purpose of evaluating the influencing factors of the university innovative knowledge level must be considered, and a questionnaire pertaining to the university innovative knowledge evaluation index must be established. Based on the expert method questionnaire in the field of innovative knowledge in universities and the statistical and factor analyses of the questionnaires recovered, the evaluation index system for the innovative knowledge in universities was finally established.

The statistical results of the expert questionnaire were as follows. The proportion of professional titles above the deputy senior accounted for 55.55% of the total responses. In terms of the professional background of the experts who filled out the questionnaire, 66.66% were related to library science. In terms of the nature of the work, library staff, research technicians, administrative staff, and other staff accounted for 33.33%, 33.33%, 11.11%, and 22.22%, respectively. Therefore, the experts selected in this paper were authoritative, professional, and academically influential in the field of the library science. The obtained data sample was used as the index layer of the entropy weight method, and the established three-level indicator was used as the sample layer. The index feature vector matrix was established, and the value of the sample layer was obtained as the weight value of the three-level indicator. The results are presented in Table 2.

Dynamic fuzzy sets (DFS) can be used to express dynamic fuzzy data [26]. Considering the fuzziness of the data, the membership of the definition element μ to the set D can be expanded from the two values of 0 or 1 in the classic set [0, 1]; however, the FS can only reflect static fuzzy data and not the dynamic nature of fuzzy data. Therefore, if the dynamic variability of the data is considered based on the fuzzy set theory, the DFS can be defined as

$$(\overleftarrow{D}, \overrightarrow{D}): (\overleftarrow{u}, \overrightarrow{u}) \times [0,1] [\leftarrow, \longrightarrow] (\overleftarrow{u}, \overrightarrow{u}) \longrightarrow (\overleftarrow{D}(\overleftarrow{u}), \overrightarrow{D}(\overrightarrow{u})). \quad (7)$$

The innovative knowledge in colleges and universities represents a key platform for colleges to obtain innovative resources. The colleges' contributions to user knowledge are based on the basic functions of innovative knowledge in colleges and universities [27]. Therefore, college innovative knowledge is a platform element that influences the adoption activities. Specifically, whether the innovative knowledge of colleges and universities can effectively analyze the user's knowledge contribution content is a key external factor that determines the adoption decision of the community managers. If the innovative knowledge of colleges and universities involves visual representation, association rule analysis, and deep data mining of the user knowledge contribution content, this knowledge is expected to play a key auxiliary role in the adoption process of college innovative knowledge managers, which can efficiently and accurately evaluate the users' knowledge, thereby providing valuable content to ensure strong data support. From the users' perspective, the security, usability, and interface

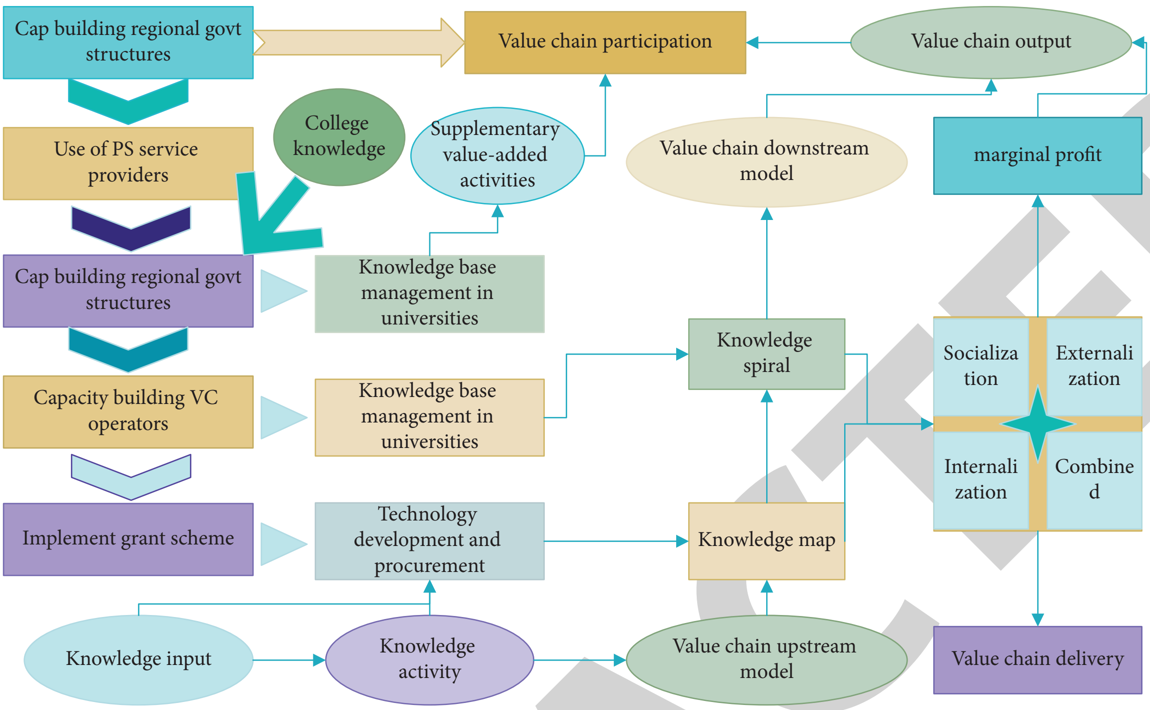

Figure 1: Knowledge value chain model.

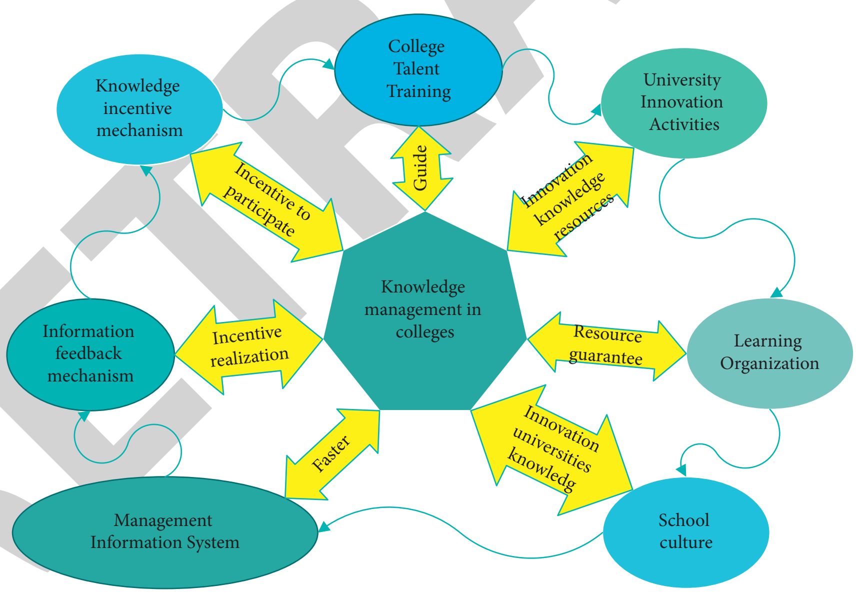

Figure 2: Innovative knowledge management model for colleges and universities.

Table 1: Evaluation principle.

Principle	Explanation
Scientific nature	Ensure objectivity and comprehensiveness and use scientific and realistic methods for the evaluation.
Comprehensiveness	Combine objective data and subjective factors; propose indicators to be consider.
Operability	Consider the meaning of the indicators, data availability, and ease of use for the evaluator.
Representativeness	Screen indicators based on core elements and leading issues.
Comparability	Flexibly set evaluation indicators to ensure the comparability of indicators.
Combination of qualitative and quantitative analyses	Collect the evaluation index information and data following the principles of objectivity and fairness.

Table 2: Standardized eigenvalues.

Evaluation index	M1	M2	...	M8	M9
Content diversity DI	0.750	0.875	...	0.500	0.500
Content innovation D2	0.625	0.750	...	0.750	0.750
Event promotion D3	0.500	1.000	...	0.875	0.500
...	...	...	...	...	...
Literature views D11	0.625	1.000	...	0.500	0.500
Literature loan amount D12	0.625	0.875	...	0.375	0.125
Literature downloads D13	0.750	0.750	...	0.375	0.000

friendliness of the innovative knowledge design in universities may affect the users' willingness to participate in knowledge contributions. In addition, factors such as the optimization of platform functions and operation management system may also influence the user's willingness to use the innovative knowledge in universities, which in turn affects the richness and usefulness of the knowledge in the community. These factors indirectly affect the adoption decision of college innovative knowledge managers to the users' knowledge contribution.

4. Results Analysis

4.1. Analysis of Learning Samples. To determine the first-level indicator data, the original score and weight of the second-level indicator must be determined. Combined with the calculated second-level index weight, the second-level index score weighted data of 100 universities and colleges' innovative knowledge are determined, which is the learning sample, as showed in Figure 3. Levels 1, 2, and 3 correspond to A, A+, and A−, respectively.

The number of input layer nodes $m = 8n = 1$; therefore, the range of the hidden layer nodes can be determined. The training of the number of hidden layer nodes from 5 to 14 can be realized through the fuzzy algorithm. The error values of the 10 evaluation results are compared, as shown in Figure 4.

According to the error value of the 10 training results, when the number of hidden layer nodes is 12, the evaluation result of the innovative knowledge level of colleges and universities is the most accurate; therefore, the number of hidden layer nodes is set as 12. After setting the main parameters and functions, 100 training samples are set. The prediction effect is verified by comparing the actual grade of the model evaluation grade. After the programme runs, a line chart of the actual level of the innovative knowledge and model evaluation level of the university and runtime of the programme are output. The results of evaluation model operation are shown in Figure 5.

4.2. Identification and Analysis of the Key Influencing Factors of the DEMATEL Method. Considering the organization members and relevant experts participating in the knowledge management activities in the universities as the research object, 240 questionnaires were distributed, and 214 questionnaires were recovered. The recovery rate was 89.17%, and 198 valid questionnaires accounted for 92.52% of the total recovery. The questionnaire used a scale of 0–9 to determine the direct influence matrix among the related factors, where 0 and 9 indicate that the degree of influence among the factors is the weakest and strongest, respectively. The normalized direct influence matrix G is calculated, the comprehensive influence matrix among the factors is determined, and the influence and influenced degrees, centrality, and cause degree of the influence factors are determined. Moreover, the cause-result diagram of the influence factor index is plotted. The results are shown in Figures 6 and 7.

According to the influence degree, influenced degree, centrality, and cause degree rankings of the factors affecting the knowledge management ability of colleges and universities, the following conclusions can be drawn: the top ten rankings of the influence degree of each indicator correspond to the Bgs cooperative innovation, B1 network centrality, B33 talent training intensity, B64 system structure design, Bs management system integration, B1 knowledge operation mechanism, B21 organizational structure level, Bg1 technology innovation, B43 system innovation, and B22 employee participation. These factors are highly likely to affect other factors, thereby influencing the development and trend of knowledge management capabilities in colleges and universities, and are classified as the cause factors. According to the influencing factors, the top ten ranks in decreasing order are as follows: B4 system culture, B71 customer demand orientation, B21 organizational structure level, Bs management system integration, Bg3 system innovation, Bo3 software and hardware equipment, Br2 information communication channels, Bg1 technology innovation, B64 system structure design, and Bgs cooperative innovation. These factors are easily influenced by other factors, and these factors can be reversed to identify the key factors that affect the knowledge management ability of colleges and universities, corresponding to the result factor. The top ten ranks for the centrality values of various indicators in decreasing order are as follows: B43 system culture, Bs management system integration, B21 organizational structure level, Bgs cooperative innovation, B4 system structure design, B71 customer demand-oriented, Bg3 system innovation, and Bg technology innovation. The strength of B33 talent training and centrality of B1 network can determine the importance of various indicators for the factors influencing the college knowledge management capabilities. A higher degree of centrality corresponds to a

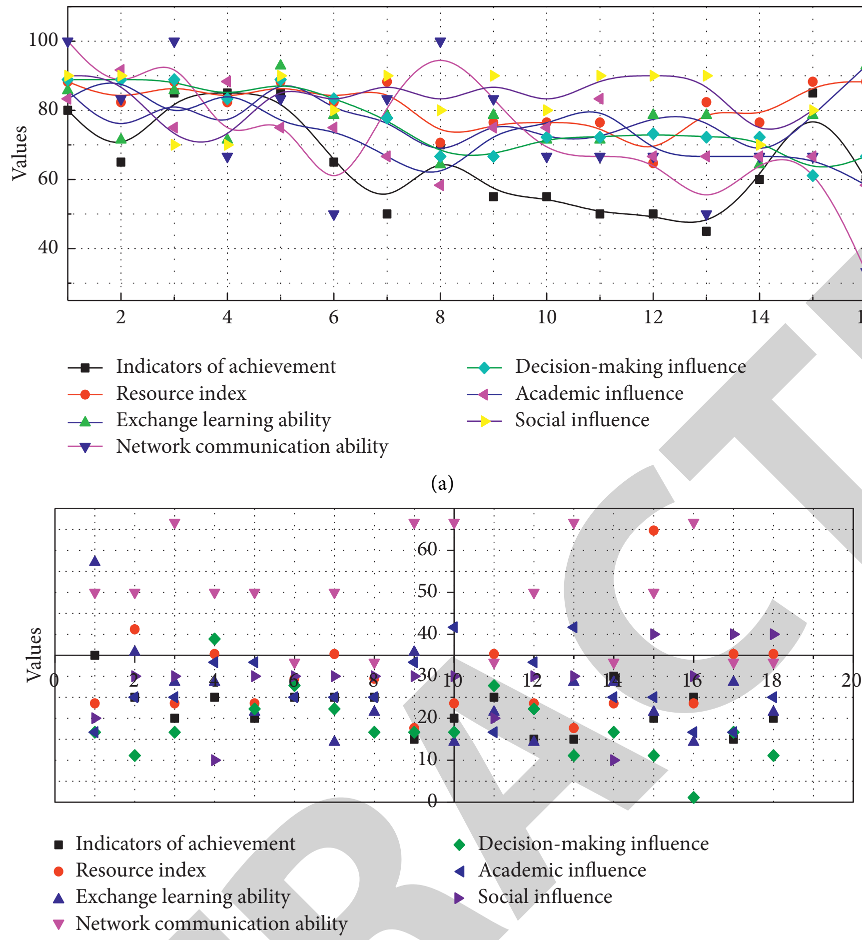

Figure 3: Study samples.

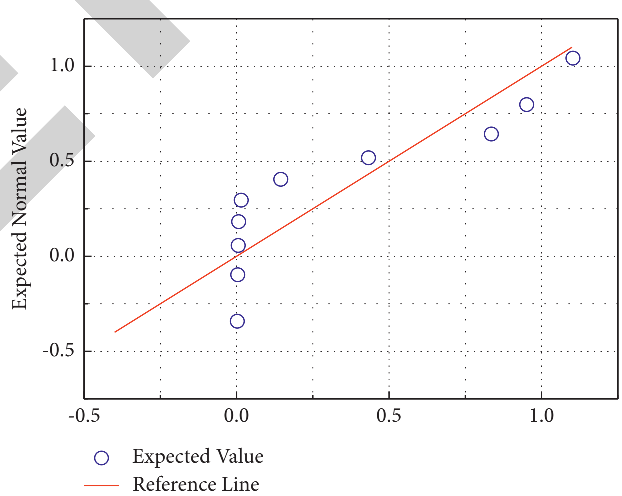

Figure 4: Model error values under different hidden layer nodes.

larger importance of this influencing factor in the knowledge management capabilities of colleges and universities. The institutional culture based on the corporate culture guidelines is the most important influencing factor. Moreover, the criterion layers of the enterprise innovation activities and information infrastructure and management information systems contain more important influencing factors, indicating that the basic conditions of scientific and

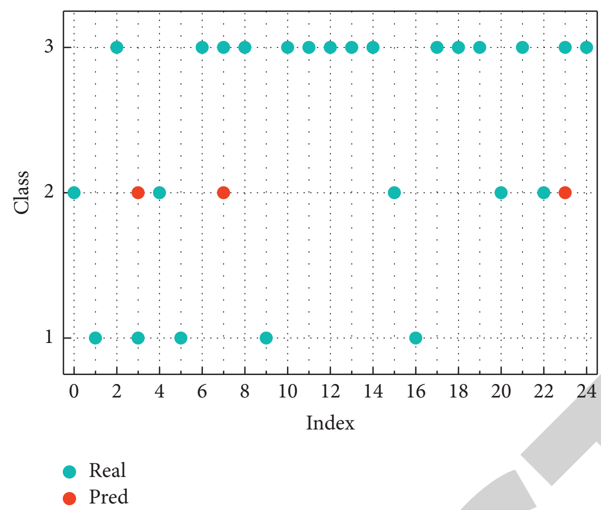

Figure 5: Evaluation model operation results.

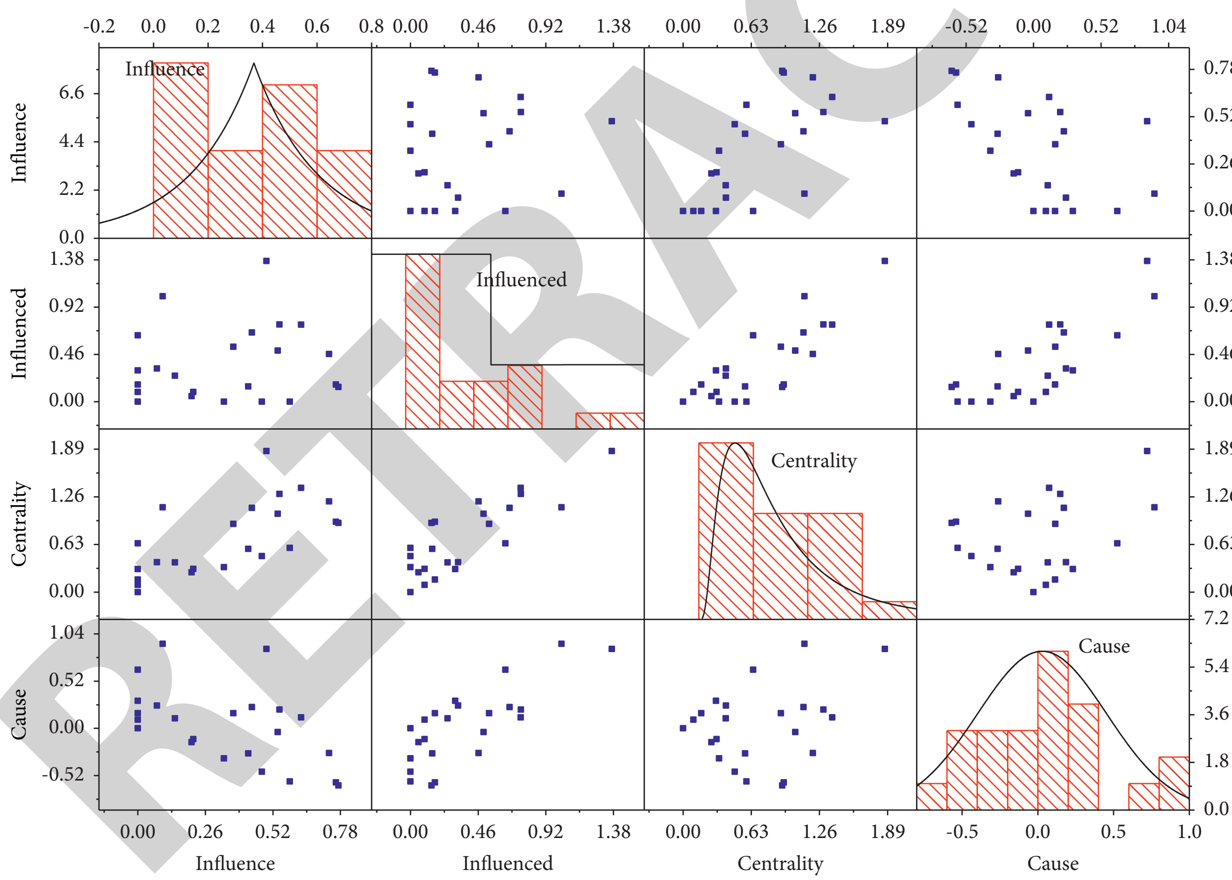

Figure 6: Influence degree, influenced degree, centrality, reasonable degree, and ranking of factors influencing the knowledge management ability of colleges and universities.

technological innovation enterprises and the conducted innovation activities can enhance the influence of the knowledge management capabilities.

4.3. Screening Analysis of Key Evaluation Indicators Based on Artificial Intelligence. In the actual application of the model, due to the lack of theoretical basis or the incorporation of excessively many subjective factors, certain unimportant independent variables may be introduced in the neural network, affecting the accuracy of the model. In the process of establishing the innovation knowledge evaluation system of colleges and universities, there may be several indexes that reduce the accuracy of the model. Therefore, the selection of

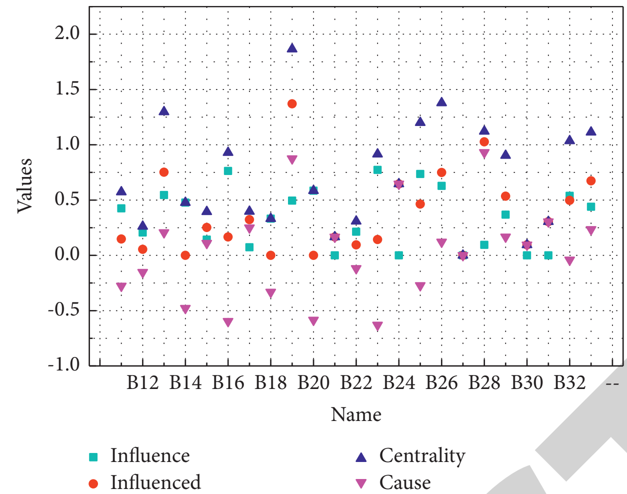

Figure 7: Causes of indices of factors influencing the college knowledge management ability.

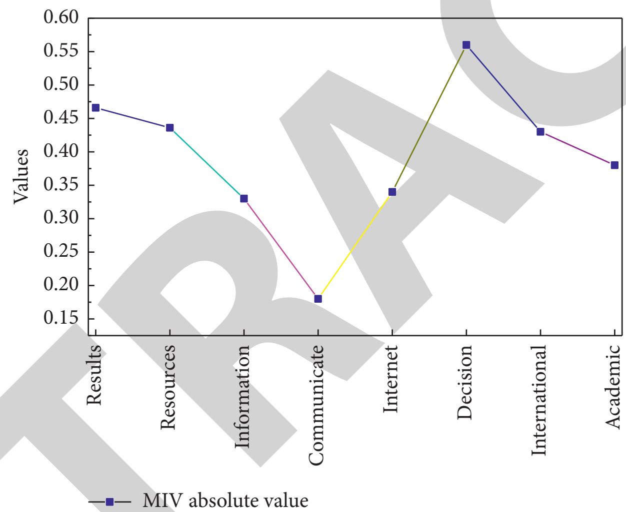

Figure 8: MIV value of each index of university innovative knowledge evaluation.

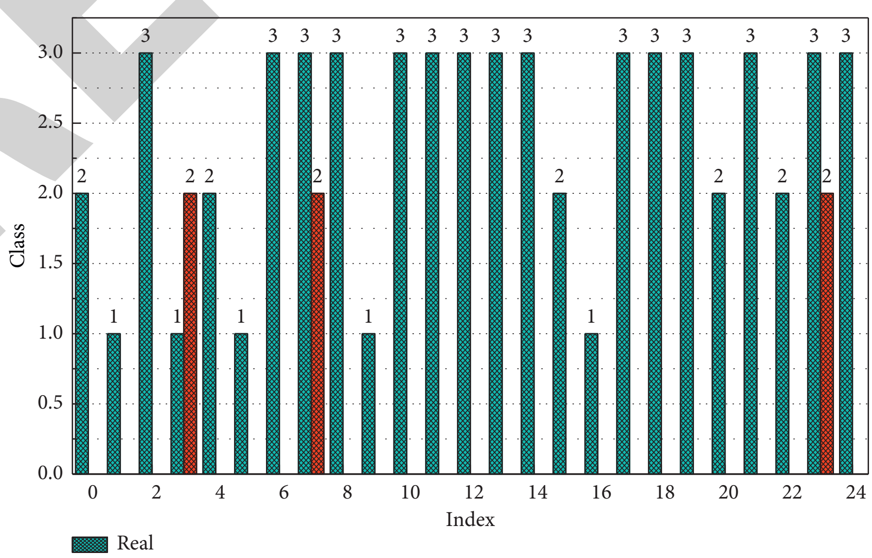

Figure 9: Key indicators running results.

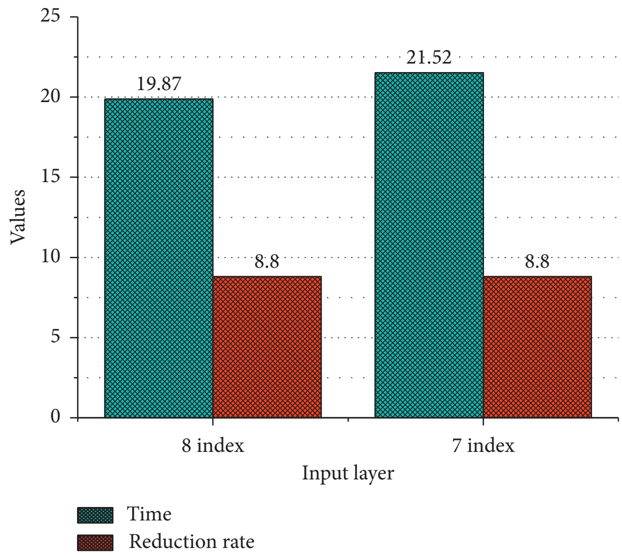

FIGURE 10: Training time comparison.

evaluation indicators in this paper should follow the principle of priority for key evaluation indicators. In this way the evaluation performance can be optimized. According to the abovementioned selection principles and procedure design steps of the artificial intelligence algorithms, the average impact value MIVi of each evaluation index of the university innovative knowledge is shown in Figure 8. The evaluation index MIVi >0.3 is the key index of the university innovative knowledge evaluation model.

Based on the fuzzy algorithm, the university innovative knowledge evaluation model selects 100 data samples to evaluate the model training. The learning rate is set as 0.05, the maximum number of iterations is set as 10,000, and the parameters are set as constant. Eight and 7 key indicators are considered as the input parameters. Figure 9 shows the model running results when 7 key indicators are used as input parameters.

The screenshot of the running results indicates that the training time to reach the predetermined requirements under eight input layers is 19.87 s. To obtain the predetermined requirements, the artificial intelligence algorithm requires a training time of 21.62 s under 7 input neurons, and the training time is slightly increased, as shown in Figure 10.

The training time and evaluation accuracy rate indicate that although the key indicators based on artificial intelligence reduce the efficiency of the evaluation model evaluation and increase the training time, the evaluation accuracy is improved. The evaluation accuracy is the key to the operability of the model. Therefore, it can be concluded that the feature screening based on artificial intelligence can optimize the proposed innovative knowledge evaluation model of universities.

5. Conclusion

The evaluation of innovative knowledge in universities was examined. After establishing the university innovative knowledge evaluation index system, based on the index system and fuzzy algorithms, a fuzzy evaluation model of the university innovative knowledge was constructed. The performance of the university innovative knowledge evaluation model established based on artificial intelligence was optimized, and the model was applied. The research work and results can be summarized as follows. This article establishes an evaluation index system for the innovative knowledge in colleges and universities. The questionnaires were formulated considering the typical cases of innovative knowledge evaluation systems in foreign universities, survey of relevant literature, characteristics of innovative knowledge in universities, and expert consultation. Through the factor analysis of the results of the questionnaire survey, the levels and weight of the indicators were determined. An innovative knowledge evaluation model for universities based on the fuzzy algorithm and artificial intelligence algorithm was established. In the model establishment process, the network topology, activation function, learning parameters, and improved neural network algorithm were identified. The model was trained and verified through the processed learning samples. Next, the artificial intelligence algorithm was used to optimize the established innovative knowledge evaluation model of the university. During the optimization process, the input layer variables of the neural network were screened according to the correlation, and 7 out of 8 secondary indicators, which were nodes of the input layer, were selected. The optimized innovative knowledge evaluation model of colleges and universities was applied. The evaluation results of the university innovative knowledge show that the proposed model of the university innovative knowledge evaluation based on the fuzzy algorithm and artificial intelligence algorithm is operable, scientific, and practical.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgments

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