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DATA MINING-BASED MULTIDIMENSIONAL EXTRACTION METHOD FOR INDICATORS OF SOCIAL SECURITY SYSTEM FOR PEOPLE WITH DISABILITIES

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Abstract. This article examines the multidimensional index extraction method of the disability social security system based on data mining. While creating the data warehouse of the social security system for the disabled, we need to know the elements of the social security indicators for the disabled. In this context, a clustering algorithm was used to extract the indicators of the social security system for the disabled by investigating the historical dimension of social security for the disabled. The simulation results show that the index extraction method has high coverage, sensitivity and reliability. In this paper, a multidimensional extraction method is introduced to extract the indicators of the social security system for the disabled based on data mining. The simulation experiments show that the method presented in this paper is more reliable, and the indicators of social security system for the disabled extracted are more effective in practical application.
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1. Introduction

Having professional skills such as performing all social security-related transactions of the personnel working in both public and private sector enterprises in document or computer environment in accordance with the relevant legislation, preparing personnel files in a timely and accurate manner, and organizing private insurance transactions such as private pension, life and non-life insurance are very important to train "Social Security Professionals". In this context with the popularization and application of the information-based office concept in various government service departments, the rapid development of information-based management and construction in social security departments has been

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effectively promoted. In the process of informatization office, each business window of social security department has stored a huge amount of business, management, office and other historical data. They are limited by the information technology used in social security department for informatization construction. There are certain defects, resulting in the data statistics and analysis development platform used by social security department has been unable to meet the development of relevant business of social security department nowadays, and cannot be fully and effectively utilized by the stored in the platform. Historical data can be analyzed and thus fully and effectively utilized. By collecting a large amount of relevant data, the social security department analyzes various living and social needs of disabled people in the current social development, and establishes a social security system for disabled people by combining relevant policy support.

Social security work for the disabled is an important job of the social security department, and the social security system for the disabled is an important component of the world's system of social human rights and socialist construction. The normal functioning and perfect degree of the social security system for persons with disabilities is of great importance to ensure its social cohesion and stability and economic development in the world. The social security system for persons with disabilities includes not only the provision of medical care, assistance and related support and protection services for the employment of persons with disabilities, but also the protection of reasonable and legitimate rights and interests of persons with disabilities, such as the right to education, employment and development.

The improvement of social security system for the people with disabilities is not only the improvement of the social survival and development environment by effectively protecting their legitimate rights and interests, but also to reduce the discrimination against people with disabilities in society and effectively resolve the conflicts between different groups in society by establishing a social security system for people with disabilities that is more suitable for their living needs, which is an important precondition for maintaining the stable development of society.

When establishing the social security system for persons with disabilities, social security departments need to accurately extract the indicators of the social security system for persons with disabilities in order to improve the degree of perfection of the social security system for persons with disabilities. However, because many factors need to be considered in the process of establishing the social security system for people with disabilities, it brings a great challenge to the work of extracting indicators of the social security system for people with disabilities. The method of extracting indicators of the social security system for persons with disabilities mentioned in the literature [3] uses a modular approach to extract indicators by dividing the social security system for persons with disabilities into indicators with higher sensitivity. This method uses the principle of ignoring indicators with weak correlation when extracting indicators, which

leads to large deviations in the actual indicator extraction results and affects the normal operation of the social security system for persons with disabilities.

The indicator extraction method [4] mentioned in the literature uses the principle of quantitative analysis of data, but since the extraction accuracy of this indicator extraction method is proportional to the amount of data, and the quantitative analysis of large amounts of data, the demands on the performance of the high data processing platform are valid in extracting the indicators of the social security system for the disabled. is not. [5] The aforementioned indicator extraction methods are mainly aimed at extracting indicators in the time-frequency domain and cannot extract indicators for the abstract system. In addition, an indicator extraction method based on the principle of key factor analysis mentioned in [6] is used in practice to extract indicators by filtering the main influencing factors and then calculating the weights of the main influencing factors and ranking them.

Data mining is the process of using different algorithms to search for implied information in large amounts of data. The purpose of data mining can be any type of data source, whether structured, semi-structured or heterogeneous data, and can be extracted by data mining algorithms to find the active data. The exponential growth of social security data with the continuous development of the social security system has increased the difficulty of extracting the indicators of the social security system for the disabled, but has also made it possible to apply data mining. In this context, this article will examine the multidimensional extraction method of social security system indicators for the disabled based on data mining and will test the performance of this indicator extraction method.

2. Disabled as a Concept

Disability is increasing day by day in the world. Among the reasons for this increase are the increasing harmful effects such as proliferation of wars and conflicts, prolongation of human life, foods with additives, radiation rays increase in the use of chemicals, increase in obesity and cardiovascular diseases, addiction the increase in the use of substances that cause traffic congestion and occupational health and safety it can be considered that the measures are not taken enough [1].

According to the Declaration of the Rights of Persons with Disabilities adopted by the United Nations General Assembly disabled; 'The work that a normal person has to do on his own in his social life, as a result of any hereditary or consequential deficiency in mental abilities defined as 'unable to (BIANET, 2018).

3. The status of the disabled in the world

In 2010, it was estimated that 15% of the world's population has some form of disability. Health Survey determined 780 million (15.6%) while the Global Burden of Disease study estimates this number as approximately 975 million

(19.2%). The World Health Survey is 110 million people (2.2%) have very serious difficulties in fulfilling their functions. Global Burden of Disease—such as quadriplegia, severe depression, or blindness. the number of people with 'severe disability' as the disability category corresponding to 190 million (3.8%). 95 million, of which 13 million (0.7%) are severely disabled. Only the Global Burden of Disease study measures child disability (0-14 years), (WHO, 2011).

4. Data mining-based multidimensional extraction method for indicators of social security system for people with disabilities

4.1. Data warehouse schema design. According to the actual application requirements of the social security system for the disabled and combined with known data warehouse models, this article is based on the star model to design the data warehouse operating model of the social security system for the disabled. In the star schema data warehouse, all data is contained in the form of data tables. The star schema of the data warehouse takes a central table as the center of the data storage of the data warehouse, and the central table contains all the non-redundant social security data of the disabled; When the data warehouse adopts the star schema, each star branch of the schema has subsidiary tables of different sizes, and each data size corresponds to a subsidiary table. Each secondary table corresponds to a different social security job for the disabled, and the dimensional characteristics of different secondary tables are different, and the data structure, data volume, and stored data format are not necessarily the same. In the data warehouse of the star model, all side tables contain only one set of attributes, for example, if the disability social security system is specific to each region of the country, the side table corresponding to the location dimension can characterize the situation.

The star schema data warehouse enables upward and downward drilling of the data stream in a time dimensional sequence. This processing enables visual comparison of historical data of different months and quarters of the same year and historical data of the same months and quarters of different years, so as to compare the social security work of persons with disabilities in a certain region or city and facilitate timely understanding of the construction process of the social security system of persons with disabilities. By adopting normalization of the attribute dimensions of the subsidiary tables of the star schema data warehouse, it can improve the query and retrieval efficiency when performing queries on the data However, the adoption of normalization of attribute dimensions of subsidiary tables will increase the query connections in the data warehouse, which will easily increase the complexity of subsequent data mining processing and affect the data mining efficiency. After designing the data warehouse schema, the data warehouse of social security system for disabled people is planned.

4.2. Planning a data warehouse for the social security system for people with disabilities. Considering the various operational operations of

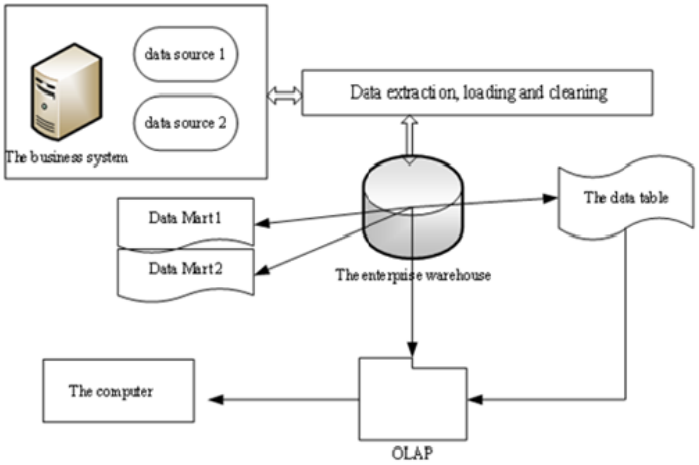


FIGURE 1. Data warehouse structure diagram of social security system for the disabled

the actual social security system for people with disabilities, this paper will plan according to the data warehouse structure shown in the Figure 1.

Figure 1 shows the structure diagram of social security system for disabled. Taking advantage of the characteristics of small scale, flexible organization, easy maintenance and management, and short recovery period of data marts, independent data marts of different social security business for persons with disabilities are established. As each data mart is independent of each other, it will lead to different structures, sources and coding forms of social security business data for persons with disabilities, which will make data integration very difficult. Therefore, a global data mart planning strategy is needed.

The social security data mart for persons with disabilities should contain a large number of data sources that can support the operation, decision-making and management of the social security system for persons with disabilities and address data paths within the social security system. Considering the daily work of social security for the disabled in this article, different sizes of data should be questioned and used according to their size. Data usage is maximized based on attribute elements in the side tables of the star schema data warehouse [2].

The social security system is built to provide some larger operational and decision support systems, and these data marts together form a way to provide decision support systems across the social security system. Data marts often share some of the information within the social security system and across the data mart architecture, and these shared dimensions, or identity dimensions, can then link together information that may become independent data marts.

Data marts are dimensional, and dimensional data allows decision support to use a wide range of compound conditions to form queries. The star schema is fundamental to the design of data marts, and dimensional modeling is used to maximize their effectiveness. The design should attempt to predict all the ways in which the data mart will be used.

When planning a data warehouse for the social security system for people with disabilities, a certain logic is followed. First, the target needs of the business related to the social security of the delineated disabled people, the main content of the business, the related associated business units and the scope of the application are determined. According to the predefined objectives, the data storage content, the relationship between different data groups and the relationship between data groups, the process of data conversion and cleaning, and other abstract concepts are determined in the data warehouse [7].

5. Grasp the social security indicators of the disabled

5.1. Extracting index keywords. In this article, the mapping data space of the relevant information of the social disabled group collected by the social security department is used to form a data set, information attributes are used as labels, and the TF-IDF method is used to extract the key words of the social security indicators of the disabled. TF-IDF calculation formula is as follows [8].

$$\mathbb{Q} = \{\mathbb{Q}|q_{i1}, q_{i2}, ..., q_{in},\ i = 1, 2, ..., m\}, \tag{1}$$

In formula (1), is the occurrence times of a certain attribute tag in the overall data set in the data related to social activities of the social disabled group; $\boldsymbol{n,m}$ is the total number of occurrences of all attribute tags in the data set. The extracted text of the key words of the social security indicators for the disabled is converted into vector, and the naive Bayesian classifier is used to analyze the positive and negative action tendency of the key words of the social security indicators for the disabled. It is assumed that the set of keywords of the social security indicators for the disabled after the above steps is

$$\mathbb{A} = (a_1, a_2, ..., a_n),$$

$$\mathbb{B} = (b_1, b_2, ..., b_m),$$

where $\mathbb{A},\ a_n$ is the label attribute corresponding to the keywords of the social security indicators for the disabled, $\mathbb{B}$ is the set of categories.

In this paper is the positive and negative action tendency set of indicators. According to formula (2), the conditional probability of the items to be classified in the data set of social activities related to the social group of disabled persons under the different categories of the positive and negative action tendency sets is calculated [9].

$$P(A_s|B_l) = \frac{P(A_s)P(B_l|A_s)}{\sum_{l=1s=1}^{n} P(A_s)P(B_l|A_s)}. \tag{2}$$

In formula (2), the term $P(A_s)$ is the occurrence probability of positive and negative effects in the predisposition item to be distinguished in the data set of social activities related to the social group of the disabled; $P(B_l|A_s)$ is the probability of the occurrence of social activity data of the disabled group in $\boldsymbol{A}$ under the positive and negative effects of the indicators. After judging the positive and negative tendency of the index keywords according to the calculated Bayesian probability, the importance degree of the index keywords is determined.

5.2. Determine the importance of key words. After extracting the key words of the social security index of the disabled and forming the key words set above, the paired comparison matrix as shown in formula (3) is established by using the method of paired comparison from the key words set of the social activity data of the disabled [6]:

$$A = \begin{Bmatrix} 1 & a_{12} & ... & a_{1n} \\ a_{21} & 1 & ... & a_{2n} \\ . & . & ... & . \\ . & . & ... & . \\ . & . & ... & . \\ a_{n1} & a_{n2} & ... & 1 \end{Bmatrix} \tag{3}$$

In formula (3), a_{ij} represents the importance of keywords $\boldsymbol{i}$ compared with keywords $\boldsymbol{j}$. For example, $a_{ij} = 1$ means the importance of key word $\boldsymbol{i}$ is consistent with key word $\boldsymbol{j}$, and $a_{ij} = 3$ means that key word $\boldsymbol{i}$ is more important than key morpheme $\boldsymbol{j}$, and the paired comparison matrix also satisfies $a_{ij} = 1/a_{ji}$, if $a_{ij} = 3$, then $a_{ji} = 1/3$. When the paired comparative values of all the key words of the social security system for the disabled are determined, a numerical matrix of the importance degree of the key words in the index is generated. According to the matrix standardization calculation formula, the sum of eigenvalues of each column matrix can be obtained, and then the order of eigenvectors can be obtained [10]. When sorting the eigenvectors, the algorithm first sums up each column of the paired comparison matrix, standardizes the matrix, and obtains the normalized matrix. Calculation of matrix after standardization of key importance in numerical arithmetic average, and the corresponding key words how important to important numerical value of all keywords in proportion to the number of species, it is concluded that an important in proportion to the degree of overall importance values, and according to the proportion of requested size, the characteristics of sorting. According to the descending order of the importance value of keywords, the order of the importance value of keywords can be obtained, and the social security index elements of disabled persons can be captured. According to the above-mentioned indicators of social security for the disabled, data mining technology is used to process the data of social security for the disabled.

6. Social security data mining for the disabled

The purpose of data mining is to obtain the data with analytical significance and value through certain processing means from the massive and heterogeneous complex real data. Generally, the object data of data mining is missing and the data format is inconsistent, which requires data cleaning, integration, transformation and data protocol processing before data mining. Through data transformation, the data of social security related business activities of the disabled are transformed into a more suitable form for mining. According to the principle of standardized processing of data format, the social security business data of the disabled are scaled according to their data attributes, labels and other information, so that they fall into a specific interval. In this paper, the historical social security data of the disabled stored by the social security department will be standardized according to formula (4) [11]:

$$r' = \frac{r - \overline{H}}{K_H}. \tag{4}$$

In formula (4), $\boldsymbol{H}$ is the attribute of the data of social security-related business activities of the disabled; $\overline{H}$ is the mean value of attribute data of business activities related to social security of persons with disabilities, and K_H is the standard deviation of attribute data of business activities related to social security of persons with disabilities. The tag value $\boldsymbol{r}$ of the data attribute data of social security-related business activities of persons with disabilities is normalized to r'.

After the data conversion, the data protocol processing method is used to constrain the data set of social security-related business activities of persons with disabilities to ensure the integrity of the data of social security-related business activities of persons with disabilities to the greatest extent. Through the traversal of the complete set of original data related to the social security of the disabled, the attributes that affect the analysis of the social security indicators of the disabled are deleted through the analysis of data attributes in the data set. The remaining attributes of the data in the data set are gradually added to the decision tree, so as to separate the social security-related business activity data of different business attributes.

If data set $\boldsymbol{Q}$ is the collection of original data related to social security services of disabled persons, the total amount of data in the collection is $\boldsymbol{e}$, and the corresponding attribute label of the data in the data is known at the time of storage. If the total number of attribute tags in the original data set of social security-related services for disabled persons is w_i the probability that any data attribute in the set belongs to the corresponding attribute category is $W_i/\ \boldsymbol{e}$. According to formula (5), the classification expectation of data under the given

data attribute R can be calculated according to the given attribute [12]:

$$R(w_1, w_2, ..., w_i) = \sum_{i=1}^{n} \frac{w_i}{e} \log_2 \frac{w_i}{e}. \tag{5}$$

The set $\boldsymbol{U}$=$\{t_1,\ t_2,\ ...,\ t_n\}$ with known attribute data values was used to classify the original data set of social security-related businesses of the disabled, and the subset was $\{Q_1, Q_2, ..., Q_n\}$. Then, the entropy value $Y(U)$ of the data in the social security related business data set for the disabled is weighted and averaged, and the calculation formula is as follows:

$$Y(U) = \sum_{i=1}^{n} \frac{t_{1i}, t_{2i}, ..., t_{ni}}{Q} R(w_1, w_2, ..., w_i). \tag{6}$$

The information gain $G(U)$ obtained in $\boldsymbol{U}$ is:

$$G(U) = R(w_1, w_2, ..., w_n) - Y(U) \tag{7}$$

If the data protocol parameter threshold is set according to the actual data volume, structure, type and other parameters in the social security related business data set of the disabled, the historical data processed by the protocol will be greater than the set threshold of the data protocol parameter. After the data specification, the business data related to the social security of the disabled will be saved in the database. The social security system indexes of disabled persons were extracted by using clustering algorithm.

7. Realization of social security system indicators for persons with disabilities extracted

This paper uses the clustering algorithm to extract the indicators of the social security system for the disabled, and firstly initializes the clustering center. In order to improve the efficiency of clustering, ant colony algorithm is selected to improve the clustering algorithm. The data set of disabled social security-related services to be processed is taken as the initial population of the ant colony algorithm, and the cluster center is taken as the iterative target of the ant colony algorithm. It is assumed that the data set of social security-related services for the disabled after data mining processing is Q= $\{Q|\ q_{i1},\ q_{i2},\ ...,\ q_{in}\}$, i=1,2,...,m, λ is the iterative step of ant colony algorithm, and $\boldsymbol{l(i,o)}$ is the distance from the data set of social security-related services to the clustering center. According to formulas (8),(9) , ant colony algorithm is used to iteratively solve the cluster center [13]:

$$\begin{aligned} \lambda_{ij} &= \frac{A}{l(i,j) + B} \\ \lambda_{ij}(t+1) &= K\lambda_{ij}(t) + \lambda_{ij}, \end{aligned} \tag{8}$$

$$C_j = \frac{1}{N} \sum i = 1^N Q_i (Q_i \in C_j). \tag{9}$$

In formula (8), $\boldsymbol{A}$ and $\boldsymbol{B}$ are randomly selected algorithm iteration constants, whose values are positive; $\boldsymbol{K}$ is the residual strength of pheromone after the ant colony algorithm is iterated; C_J is the clustering result obtained by each round iteration of ant colony algorithm. After the combined data set, $\boldsymbol{N}$ represents the number of data in the social security-related business data set for the disabled, and λ_{ij}(t) represents the size of pheromone between data $\boldsymbol{i}$ and data $\boldsymbol{j}$ at the time $\boldsymbol{t}$.

After the cluster center of the clustering algorithm is determined, the distance between two data is calculated randomly. The distance between the data in all the data sets is calculated successively, and the minimum distance is selected as the threshold value $\bar{\boldsymbol{l}}$. Then, according to the principle that the density of the data set meets:

$$\boldsymbol{Density}(q_i) \leq \boldsymbol{Density}\ (q_i)/\ \boldsymbol{4},$$

the isolated data is excluded from the set, and then the new cluster center is obtained by repeating the above steps. The specific calculation formula is as follows [14]:

$$\begin{aligned} &\bar{l} = \frac{l(i,j)}{n^2} \\ &Density(q_i) = \{e \in C_j | l(q_i, e) \leq r\}. \end{aligned} \tag{10}$$

In formula (10), $r = \lambda * \bar{l}$, $\boldsymbol{Density}(q_i)$ represents the density of q_i. Cluster the data in the business data set related to social security for the disabled according to the following process.

By calculating the data density parameters and the distance between the classes, the clustering center is updated and the optimal solution with the minimum distance is output. In this case, the solution is the optimal partition clustering. The stopping standard of clustering algorithm is: whether the threshold change of multiple clustering centers with the same number of iterations is within the standard range, if so, it represents the end output result; If not, continue the above process. After the clustering results are output, data mining is completed by dividing the data according to the final clustering center. The result of processing the data of the social security system for the disabled by clustering algorithm is the index of the social security system for the disabled. Through the above content, this paper has completed the research on the multidimensional extraction method of the indicators of the disabled social security system based on data mining.

8. Simulation experiment research

The disabled social security system is to measure a country's social security construction of the advanced level of important standard, in order to improve the social security system for the disabled index comprehensive cover, improve

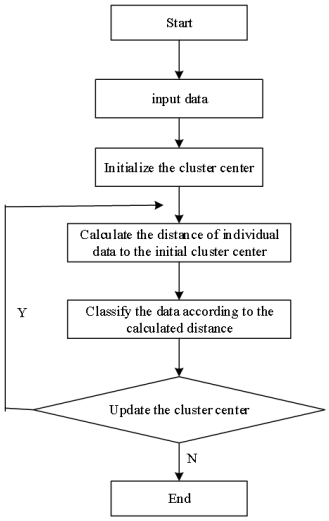


FIGURE 2. Cluster processing flow

the social security system perfect, in the traditional social security system indicators extraction method, on the basis of above the disabled social security system based on data mining is studied index multidimensional extraction method. This section will verify the feasibility and effectiveness of the multi-dimensional extraction method of the index.

9. Experimental content

This experiment as the contrast experiment, mentioned in the literature [3] based on the modular approach of target extraction method and the literature [6] mentioned indicators extraction method based on the principle of principal component factor analysis as the contrast of this experiment item, will be based on data mining in this paper, we study on the social security system for the disabled index as experiment item multidimensional extraction method. By comparing the different indexes of the three index extraction methods, the experimental verification is accomplished directly and effectively.

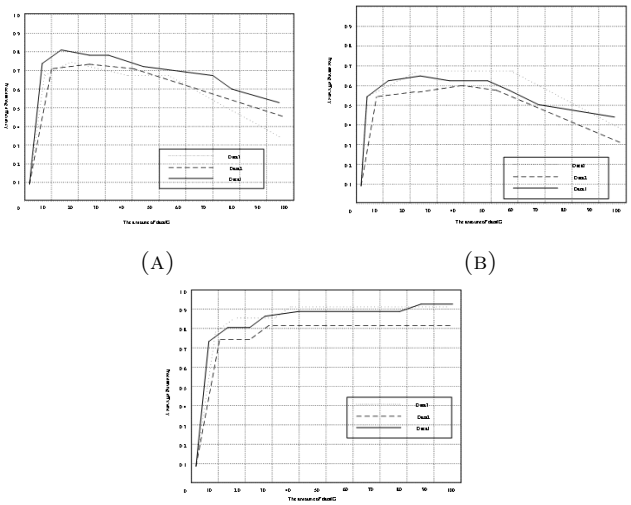
10. Experimental process

A business history data related to the social security of the disabled stored by a provincial social security department is selected as the research object of this experiment. The method mentioned in literature [3] is denoted as traditional method 1, while the method mentioned in literature [6] is denoted as traditional method 2. Three index extraction methods were used respectively to extract the social security system indexes of the disabled according to the historical data provided. By comparing the three methods, the efficiency of index extraction

under different historical data volumes was achieved. The higher the efficiency of index extraction, the better the performance of the method. The indicators extracted by the three methods are used to construct the social security system for the disabled, and the performance of the index extraction method is indirectly compared by comparing the sensitivity and coverage rate of the three social security systems for the disabled. The experimental data were processed by MTLAB software, and the final experimental conclusion was obtained through comprehensive analysis.

11. Experimental results and analysis

In the built simulation experiment environment, a data set of business history data related to the social security of the disabled stored by the social security department was used to test the processing efficiency of the three index extraction methods when different data quantities were processed in the same simulation experiment environment. Three groups of historical data at different time periods were randomly selected, and the experimental results are shown below. In Figure 3, curve data 1, data 2 and data 3 represent social security historical data with different time periods and data volumes extracted from a business historical data set related to social security of the disabled stored by the social security department in this simulation experiment.



(A) (B)

(C)

FIGURE 3. Experimental results of different index extraction methods. (A) Traditional method 1 experimental results. (B)Traditional method 2 experimental results. (C)The experimental results of this method are presented.

The analysis of the relationship between curves in figure 3 shows that when the index extraction method mentioned in literature [3] is used to extract the index of social security system from a data group with a data volume of 10G, the parallel processing efficiency of this method reaches the highest value of 0.81. With the increase of experimental data, the parallel processing efficiency of this index extraction method shows a trend of decline, reaching the lowest value of 0.36. When the index extraction method mentioned in literature [6] is used to extract relevant indexes from data of 10-50 G, the parallel processing efficiency of index extraction is in a stable state as a whole. When the experimental data is greater than 50G, the parallel processing efficiency of index extraction method gradually decreases until the lowest value is 0.3. However, the index extraction method studied in this paper is applied to extract the indexes of social security system from three groups of different data. The processing efficiency of this index extraction method is consistent with a high value and does not change dramatically with the increase of data volume.

Three index extraction methods are respectively used to extract the indexes from the data set, and the corresponding social security system is established. By comparing the sensitivity and coverage rate of the three social security systems, the reliability of the extraction method of the three indicators was indirectly measured. The sensitivity and coverage rate of the social security system established according to the index extraction method are shown in the Table 1.

Table 1. Comparison of sensitivity and coverage index data

	Method of this paper		Traditional method 1		Traditional method 2	
The serial number	Sensitivity %	Coverage rate %	Sensitivity %	Coverage rate %	Sensitivity %	Coverage rate%
1	93.6	93.2	72.5	71.6	74.8	76.8
2	93.1	88.4	76.3	65.9	71.8	77.1
3	95.3	92.6	74.8	70.2	72.7	75.6
4	94.7	92.5	74.4	68.3	69.8	74.3
5	93.1	86.9	79.1	65.2	69.9	74.9
6	91.5	90.6	76.2	70.7	70.6	76.7
7	91.6	90.8	78.9	68.9	72.4	76.4
8	91.4	91.5	77.7	65.6	74.0	75.2
9	94.3	91.1	76.3	65.5	71.1	74.5
10	90.8	93.0	79.8	72.4	73.6	77.2
11	95.2	89.7	77.6	70.3	75.8	74.8
12	91.0	89.5	77.9	70.1	74.4	74.3

By analyzing the data in the above Table 1, it can be seen that the sensitivity and coverage of the social security system established by using this method are higher than those of the other two groups of traditional methods. The higher the coverage rate of the social security system is, the more effective it is to protect the rights and interests of the disabled in social life. The more sensitive the social security system is, the more the protection of the social security system for the

disabled can be guaranteed. The above indicates that the indexes extracted by this method are more comprehensive and the method is more reliable. To sum up, the multi-dimensional index extraction method of social security system for the disabled based on data mining studied in this paper has higher reliability and better practical application effect.

12. Conclusion

We see in the national and global researches for people with disabilities that the world 15% of the population consists of people with disabilities. In this context, the extent of the rights provided for the disabled is gaining importance day by day. The social security system for the disabled is an important part in the process of national construction. In order to improve the protection of the disabled group and improve the indicators of the social security system for the disabled, this paper studies the multidimensional extraction method of the indicators of the social security system for the disabled based on data mining. Simulation experiments show that the method presented in this paper is more reliable and the indicators of social security system for the disabled extracted are more effective in practical application.

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