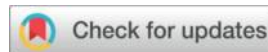


Research on career planning prediction of college students based on

grey model



Yufeng Guo ^{1,*}, Yaojun Hao ^{2,*}

¹ School of Marxism, Xinzhou Normal University

² Department of Computer Science, Xinzhou Normal University

* Corresponding author

E-mail: guoyufeng1@163.com

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Abstract.

College students' career planning refers to the process of establishing their career development goals, looking for careers, and taking necessary actions to achieve career goals on the basis of analyzing their subjective and objective factors. Career planning is an important aspect of human resource management. It is a new trend in recent years to study it with the theory and method of psychology. The systematic analysis of these problems can be used as the premise of studying the career planning of college students, helping them to make correct self-assessment and career positioning, improve their self-awareness and evaluation ability, and form a good career self. When guiding the career development direction of college students, it is necessary to predict the future career development direction of college students. An effective prediction method can provide objective and simple data support and theoretical basis for educators to help them implement educational guidance smoothly. This paper makes an in-depth analysis of the problems existing in the process of college career education, summarizes the principle of using gray prediction model, and analyzes the dimensions of factors affecting the career development direction of college students, and then carries out the modeling of the prediction model, the realization of the algorithm, and the case test of the prediction method. The research shows that the grey prediction algorithm has a good performance in the prediction of small and medium data, and the career choice of college students shows a diversified trend. They pay more attention to the match of personal interests and values, rather than traditional employment stability and salary levels. Therefore, college students pay more attention to self-realization and job satisfaction in career planning. Second, demand from the technology sector will continue to grow. With the rapid development of technology and the advancement of digital transformation, the employment opportunities of technical positions will increase significantly. Therefore, college students should actively learn related technologies to improve their competitiveness. Entrepreneurial spirit and innovation ability will be the key elements of college students' success. In the environment of economic development and increasingly fierce market competition, college students need to have entrepreneurial spirit and innovative thinking, have the courage to face challenges and flexibly respond to changes.

Key words: career planning, ideological education, grey model, human resource management

1 Introduction

With the increasing state investment in higher education, the enrollment scale of local colleges and universities is also expanding, and the number of students is also increasing. Most ordinary colleges and universities are faced with the problem that the employment direction of students is unclear and they lack a clear plan for themselves [1]. The career development of college students is influenced by many factors, including personal quality, family background, employment policy, etc., but the influence of ideological education guidance in colleges and universities is still in the main position [2]. Therefore, in college education, it is an important task for educators to guide the career development direction of students reasonably, effectively and timely. It is directly related to the improvement of the comprehensive quality of college students and the quality of talent training. Therefore, it is necessary to predict the future career development direction of college students. An effective prediction method can provide objective and simple data support and theoretical basis for educators to help them implement educational guidance smoothly.

With the rapid development of current education informatization, colleges and universities have continuously accumulated various data and information in the process of education and teaching, but many data have not been effectively used [3]. For example, in the educational administration information management system of most colleges and universities, students' academic performance data is only used for input/output and simple query operations, and the analysis and processing of students' achievements are generally only simple mathematical statistics such as statistical scores and credits. For example, in most colleges and universities that implement comprehensive evaluation, the accumulated comprehensive evaluation data are only used to supplement awards and academic achievements [4]. A large amount of valid data has not been mined and used at a deeper level. At the same time, they do not play a scientific role in guiding the career development of students, so it is difficult for the career guidance of college student management workers to meet the actual development needs of students [5]. How to train and transport talents with independent ability to meet the needs of society has become an urgent task faced by colleges and universities today. This requires us to base on the present, focus on the future, conduct in-depth thinking and exploration, innovate educational concepts, and get out of the dilemma of college development [6]. The analysis of college students' career planning is not only helpful to deepen the comprehensive understanding of the guidance theory of career planning, but also provides the theoretical and practical basis for the development of the guidance ideology of college employment.

2 Related Work

Literature [8] points out that senior students have a significant tendency in career experience, career exploration, career planning and career action, which increases with the increase of grade. Literature [9] found that systematic career planning contributes to a successful career. According to literature [10], whether college students have a clear career plan will affect their employment and career development, and the factors affecting college students' career planning have been widely concerned by scholars at home and abroad. Literature [11] found that there was no significant difference in the career development of teenagers with two grades of the same major, indicating that age was not the main factor affecting the career planning of college students. Literature [12] finds that compared with girls, boys have a more positive and active attitude towards their careers, which indicates that there are significant gender differences in college students' career planning. Literature [13] finds that college students' learning motivation, adaptability to study and life, career decision-making ability and application of career

planning strategies are significantly positively correlated with career planning.

3. Study on college students' career planning behavior choice and its influencing factors

3.1 Analysis of influencing factors of college students' career planning

The influencing factors of college students' career planning mainly include internal factors and external factors. A rough scientific analysis and reasonable explanation of internal and external factors can help college students establish more scientific and regular concepts and consciousness in the process of career planning. Internal factors, that is, self-factors: From the perspective of college students' own analysis, including their interests, hobbies, personality, own ability and objective understanding. The main body of college students' career planning is college students themselves, so it is necessary to establish a more humanized development platform for college students, give them space to grow, and formulate humanized training plans. Since college students are the main body of career planning, schools and society should strengthen investment in college students' career planning, improve the system of college students' career planning, create more favorable conditions for college students' career planning, and let them know themselves more clearly [11]. Students' self-awareness includes whether they know their own interests; Do you know what you're capable of? Do you know your strengths and weaknesses? Are you satisfied with your college life? Do you have any plans for your college life? Do you know your growth plan for the next three to five years? Among the factors of college students themselves, the construction of college students' spiritual world is also worthy of our attention. Facing the rapid changes of the real society, the spiritual world of college students is a severe test. The spiritual life education of college students mainly includes the cultivation of moral quality and professional attitude. How to establish a good moral character and a good professional attitude is also an upward dimension of their own factors. For college students themselves, before formal employment, they should participate in social practice, carry out various types of pre-employment training, cultivate a good professional attitude and improve professional accomplishment. Through ideological and political education, a series of education is carried out to improve college students' understanding and correct outlook on life and world, enrich their spiritual world, and more calmly face the real society and cruel workplace [15]. The comprehensive quality evaluation system of college students is shown in Figure 1.

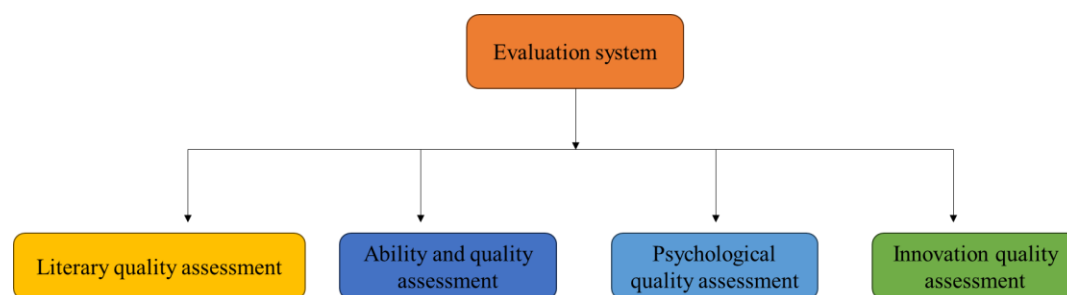


Figure 1: Comprehensive quality evaluation system of college students

External factors, i.e., social or other factors: From the analysis of the entire social environment, a career planning statement without social factors cannot be empty talk. Sooner or later, college students will leave school and face the colorful outside world. If we do not consider the influence of social factors on career planning, college students will feel confused and at a loss when they first step into the society. While receiving theoretical knowledge education at school, college students are required to take an active

part in social practice. They can't blindly learn theoretical knowledge from books. The right attitude should be able to effectively combine book knowledge with social practice, so as to truly apply what you have learned. If you do not participate in social practice, it is difficult to have a correct understanding of the society, so that many college students will encounter obstacles everywhere when they leave the campus, and can not adapt to the society well. Social demand is the most important objective condition to determine college students' career planning and career choice. First, it affects the realization degree of college students' career choice. Generally speaking, if the supply of employment exceeds the demand, the range of career choices for college students will be larger, the difficulty of employment will be smaller, and the degree of realization will be higher. If the supply of jobs is smaller than the demand, the range of choices will be narrowed and the degree of realization will be reduced. Second, it's an opportunity to influence career choices. The political system is governed by social factors. Today's college students are the first to become aware of national policies and institutions. Sending samples will make it easier to select specific industries in the future. By understanding the occurrence and development of national policies, you can judge the future trend of the industry and choose the industry in a targeted way, so as to find a suitable development space for yourself. Economic trend is the secondary reason of social factors, and enterprises are mostly concentrated in the economic field, which is the key town of college students' employment. Economy, society and culture are the three important factors of social and economic operation, and they are indispensable. Without any of them, society cannot function properly. Therefore, for contemporary college students, if they want to deepen their understanding of society, they should start from these three aspects, objectively and accurately understand the political, economic and cultural changes of society, and timely adjust their employment plans.

3.2. Predictive model modeling and algorithm implementation based on data mining

Before you can build a predictive model, you need to collect data. Through investigation and statistics, we have obtained the comprehensive quality evaluation results data of the seven classes of students in a vocational college in the past ten years. Then, the collected data is preprocessed. In this article, we transform the decentralized student data set into the annual grade master data table so that these data are stored in the same way. This data table contains all the data of each dimension of the comprehensive quality evaluation of students in a certain grade and a certain academic year. First, fill in the missing values, such as a score of 0 for a student who missed a test and -1 for a student who did not attend class. Second, remove outliers such as dropouts, suspensions, and repeat scores for students. Remove some attributes that are not relevant to the mining results, such as numbers and names. The method of normalization and attribute construction is used to generalize the attribute values in the table, and the generalized form of the table is obtained. Then, according to the data type required by the comprehensive evaluation dimension of the career development direction of college students, the basic data of students are calculated cumulatively, and a new comprehensive evaluation data form is obtained. In order to ensure the feasibility of modeling, it is necessary to check and process the pre-processed data. We found that in the above data, the amount of data is small. When the amount of data is small, GM(1,1) modeling can be considered. However, whether this modeling can really be carried out still needs to be verified. Therefore, the following verification process confirms that the research in this paper can be modeled. The process is as follows:

GM(1,1) model is a generative model, which needs to generate corresponding generative series when

solving problems. Set as the original sequence, for the generated sequence after r times of accumulation, that is

$$x^{(0)} = (x^{(0)}(1), x^{(0)}(2), \dots, x^{(0)}(n))$$

$$x^{(r)} = (x^{(r)}(1), x^{(r)}(2), \dots, x^{(r)}(n))$$

Then the summation production is:

$$x^{(r)}(k) = x^{(r-1)}(1) + x^{(r-1)}(2) + \dots + x^{(r-1)}(k)$$

$$= \sum_{i=1}^k x^{(r-1)}(i)$$

$$= x^{(r)}(k-1) + x^{(r-1)}(k)$$

For $x^{(r)}$, its inverse accumulation generates the calculation formula:

$$\alpha^{(1)}(x^{(r)}(k)) = \alpha^{(0)}(x^{(r)}(k)) - \alpha^{(0)}(x^{(r)}(k-1)) \quad (5-4)$$

$$= x^{(r)}(k) - x^{(r)}(k-1)$$

$$= x^{(r-1)}(k)$$

The ten-dimensional grey prediction model of GM(1,1) is used.

$$\text{If } X^{(0)} = [x^{(0)}(1), x^{(0)}(2), \dots, x^{(0)}(5), x^{(0)}(10)]$$

$= [227.27, 69.11, 189.98, 201.28, 156.44, 104.04, 90.39, 70.50, 52.03, 69.11]$ is the sample data sequence, respectively representing the scores of each student, and then the sequence $X^{(1)}$ is generated by first-order accumulation, $x^{(1)}(k) = \sum_{i=1}^k x^{(0)}(i)$ ($k=1, 2, \dots, 10$), get sequence $X^{(1)}$.

GM(1,1) prediction model is a first order single variable grey differential equation dynamic model

$$x^{(0)}(k) + a z^{(1)}(k) = b \quad (k=1, 2, \dots, 10)$$

Among them, $z^{(1)}(k)$ is the generation of the adjacent mean of $x^{(1)}(k)$, and the whitening equation of

the above equation is of the form $\frac{dx^{(1)}}{dt} + ax^{(1)} = b$

Applying the least square method to $x_i^{(1)}$ to determine the model parameters, we obtain:

$$\hat{a} = (a, b)^T = (B^T B)^{-1} \cdot B^T \cdot Y_9,$$

$$B = \begin{bmatrix} -1/2 (x^{(1)}(1) + x^{(1)}(2)), & 1 \\ \end{bmatrix}$$

$$\begin{bmatrix} -1/2 (x^{(1)}(2) + x^{(1)}(3)), & 1 \\ \end{bmatrix}$$

.....

$$\begin{bmatrix} -1/2 (x^{(1)}(4) + x^{(1)}(10)), & 1 \\ \end{bmatrix},$$

$$Y_9 = [x^{(0)}(2), x^{(0)}(3), \dots, x^{(0)}(10)]$$

Calculation prediction model:

$$\hat{x}^{(1)}(k+1) = (x^{(0)}(1) - \frac{u}{a})e^{-ak} + \frac{u}{a}$$

We used MATLAB software to test the relative residual, variance ratio and small probability error of the model, $Q=0.0745$, $C=0.7702$, $P=0.3333$. After consulting the accuracy standards of relevant models, the accuracy of this model can be applied.

This paper measures college students' social network from three aspects, divides network interest into information resources and career support, and divides the main influencing factors of career planning into three aspects. This paper holds that the influence of social network on college students' career planning is realized through the intermediate variable of network interest. The different characteristics of college students' social networks will have an impact on the information resources and career support in Internet interests, and the differences in Internet interests will have different impacts on college students' career planning. This paper proposes a hypothetical model of the impact of social network on college students' career planning, as shown in Figure 2.

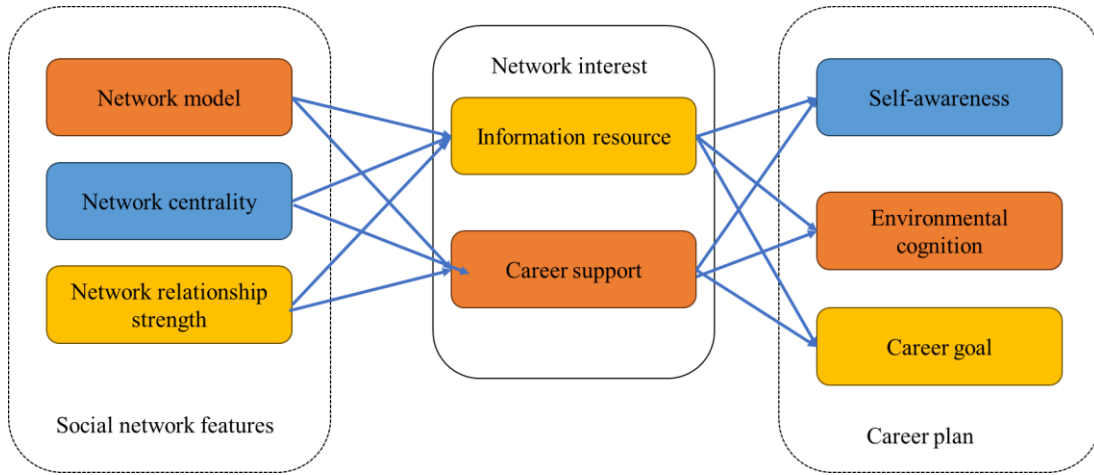


Figure. 2 Hypothesized model of the impact of social network on college students' career planning

The explained variable of this model is "whether career planning has been carried out", and there are two types of variables :1 is yes, 0 is no. Explanatory variables are factors that affect college students' individual characteristics and cognition of career planning, including gender, grade, cadre, discipline, basis for major selection, career satisfaction, cognition of career development direction, source of professional knowledge, cognition of career planning, etc., which are all dummy variables. Assuming that the probability of college students' career planning is P_i , the specific form of the logit model is as follows:

$$P_i = F\left(\alpha + \sum_{j=1}^m \beta_j X_{ij} + u\right) = \frac{1}{\{1 + \exp[-(\alpha + \sum_{j=1}^m \beta_j X_{ij} + u)]\}}$$

Where, P_i is the probability of the first college student making career planning, and i is the number of college students; β_j represents the regression coefficient of the type influencing factors; m represents the number of influencing factors; X_{ij} is the explanatory variable, and j represents the

influencing factors of college students; α is for intercept; u is the error term.

College students' career planning consciousness is an important basis to measure whether they have the need for career planning. The survey found that almost all college students said they had or were thinking about their future and prospects, and only a very small number said they had never considered sending one. However, it is worth noting that very few students are really able to make real efforts for their future ideals [20]. At the same time, students from different families have great differences in their career planning consciousness. Students whose parents are highly educated do relatively well. They have better social resources than other students and have stronger information gathering and social skills. Due to the need for a profound cultural foundation at both cognitive and theoretical levels, college students whose fathers have a bachelor's degree are significantly better than those whose fathers have only received junior high school education in terms of theoretical guidance: compared with students whose fathers have not received education or have only received primary and junior high school education, they are more receptive to new ideas [21]. The growth behavior of college students whose mothers are college students or undergraduate students is significantly better than that of college students whose mothers are junior middle school students. Their overall performance in growth exploration and growth planning was better than those whose mothers had no education or only education. Students with a primary or secondary education do better. Career planning is a systematic project, without the scientific guidance of colleges and universities, it is difficult to achieve good results. Demand for career guidance is high, and most students believe that schools need to provide good theoretical support and practical guidance. Therefore, colleges and universities should strengthen the systematic guidance and evaluation of the function and effect of college students' career planning activities in order to provide targeted help according to the actual situation and needs of students. A recognized career planning evaluation tool can help college students understand themselves correctly, let students realize their strengths and weaknesses, and then design a truly suitable career planning.

Before you can build a predictive model, you need to collect data. Through investigation and statistics, we have obtained the comprehensive quality evaluation results data of the seven classes of students in a vocational college in the past ten years. There are 61 students, and each student has 1 year of evaluation data. The evaluation includes 10 dimensions such as theoretical knowledge, practical ability, innovation consciousness and team cooperation. Each dimension is on a scale of 120 points. Then, the collected data is preprocessed.

Then, the collected data is preprocessed:

- 1) Fill in the missing value: For students without evaluation data, mark 0 points in the corresponding dimension;
- 2) Remove outliers: Remove samples with abnormal deviations in scores, such as all 0 or full marks;
- 3) Data normalization: the min-maximum normalization method was adopted to normalize the score results of each dimension to the range of 0-120;
- 4) Construct evaluation data set: Summarize normalized scores according to students and evaluation year to form evaluation input data set.

After pre-processing, we obtained a dataset of 61 evaluation samples for the training and testing of the grey prediction model.

4. Result analysis and discussion

After the grey prediction model is built, two levels of data are used to verify the validity of the model. The data of the first two years of each grade is used as the prediction set to predict the comprehensive evaluation data of students in the next two years, and the predicted results are compared with the actual results to verify whether they are consistent, so as to verify whether the optimization model is effective. The waveforms formed by the predicted data are generally consistent with the actual data, and the optimized model is effective. Some parts are slightly different. The reason for the analysis is that insufficient initial data will lead to local errors in the algorithm, and the influence of special students will also lead to prediction errors. The comparison between the predicted data and the actual data is shown in Figure 3.

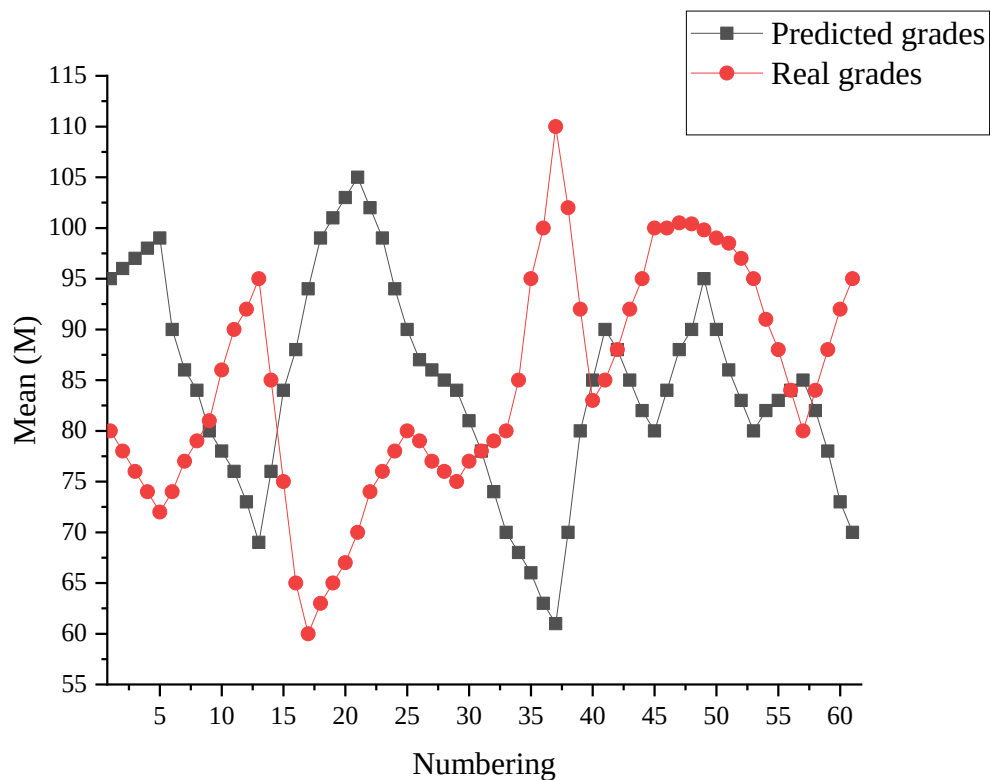


Figure 3 Comparison of predicted data with actual data

A recent survey on graduates' satisfaction with career planning shows that some graduates are not satisfied with the help provided by their schools and society in terms of career planning services and career guidance. The results of the survey reflect that the current career planning of college students has not fully aroused the high attention of the school and the society. Specifically, only about 20 percent of the graduates surveyed were satisfied with the services provided by the university's career center. The main complaints are that career planning education resources are relatively weak, professional career guidance is insufficient, and many universities lack systematic and professional personnel training programs. This shows that the means and mode of vocational planning education in schools are relatively simple, and the degree and effect of guidance need to be strengthened. Employment services at the social level also have a similar problem and cannot fully meet the development needs of graduates. These

circumstances reflect that there is still much room for improvement in the development of college students' career planning education and the provision of vocational guidance services. The results of this survey show that college graduates are less satisfied with career planning services both on and off campus. This reminds schools and society to pay more attention to and invest in the career development of college students, and take more active and effective measures to help students make career planning and improve their employability. The satisfaction of college graduates with employment services provided by the school and the society is shown in Figure 4.

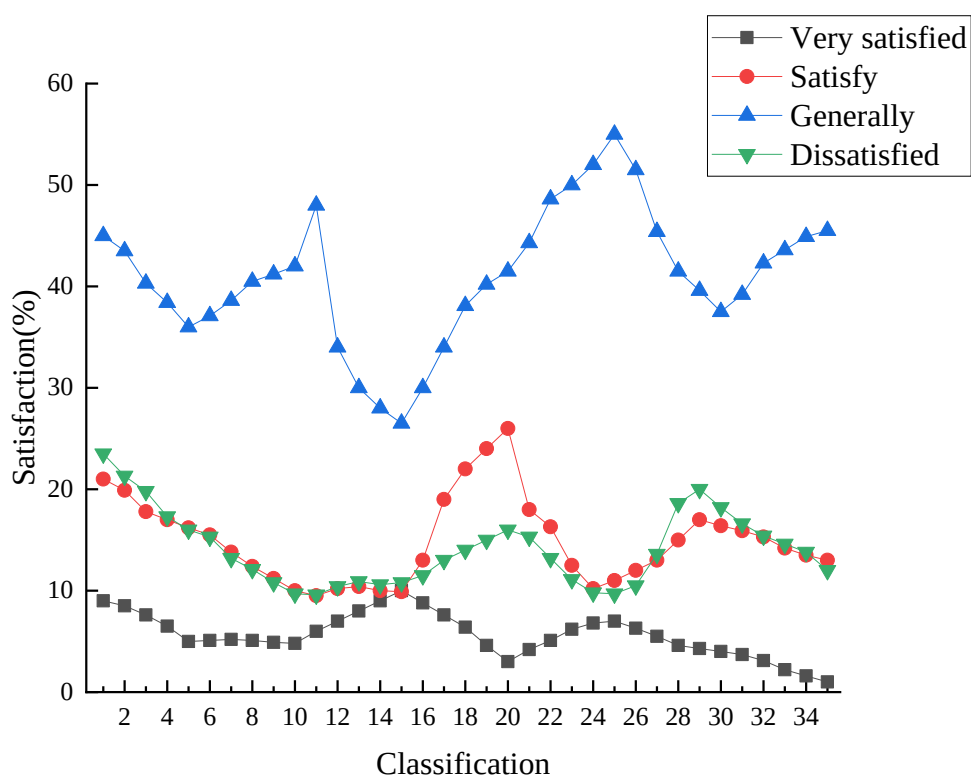


Figure 4: College graduates' satisfaction with the university and social employment services

The survey shows that the vast majority of colleges and universities have set up specialized career planning courses or employment guidance services, but some college students still say that the guidance in these areas is not enough. Further analysis shows that when many college students encounter difficulties in career selection and job hunting, they first turn to their parents or relatives and friends, and rarely take the initiative to seek help from the school's career guidance department. On the one hand, some college students are still in a confused state of career development, have not formed the consciousness of active planning and exploration, and are more dependent on external forces; On the other hand, it also reflects the problems existing in the current college career planning education, such as insufficient publicity and guidance, and the service level needs to be improved. In general, although career guidance has been greatly developed in recent years, the communication and interaction between colleges and students in career planning still need to be strengthened. Universities should take the initiative to strengthen career publicity, innovate guidance services, and help students establish a sense of independent planning and improve employability. This is the current and future period of China's colleges and universities to promote the career development of college students the key direction. The

knowledge sources of college students' career planning are shown in Table 1.

Table 1 Sources of college students' career planning knowledge

Career planning service	Frequency	Percentage (%)
School career guidance office	181	30.17
Parents	159	26.5
Newspapers, magazines, etc.	200	33.33
Employment association	60	10
Total	600	100

The survey found that the main way for college students to acquire career planning knowledge is not through school channels. Only 30.17% of students choose career centers and employment associations; Parents and newspapers and magazines were selected by 26.5 percent and 33.33 percent, respectively. This phenomenon is closely related to the problems existing in the current college career planning education. The propaganda and guidance of universities and colleges in this area are not enough to become the main channel for students to acquire relevant knowledge. This suggests that it is necessary for schools to further strengthen career planning education and improve students' ability and quality to carry out career planning. Career planning is of great significance to college students and is related to their employment development. Schools should give full play to the leading role, innovate the content and form of career planning education, strengthen the communication between teachers and students in the process of career guidance, help students establish a sense of independent planning, and master scientific career decision-making methods. This is an important point to promote the career development of college students at present and in the future. The degree of emphasis on the position of college graduates in career planning is shown in Figure 5.

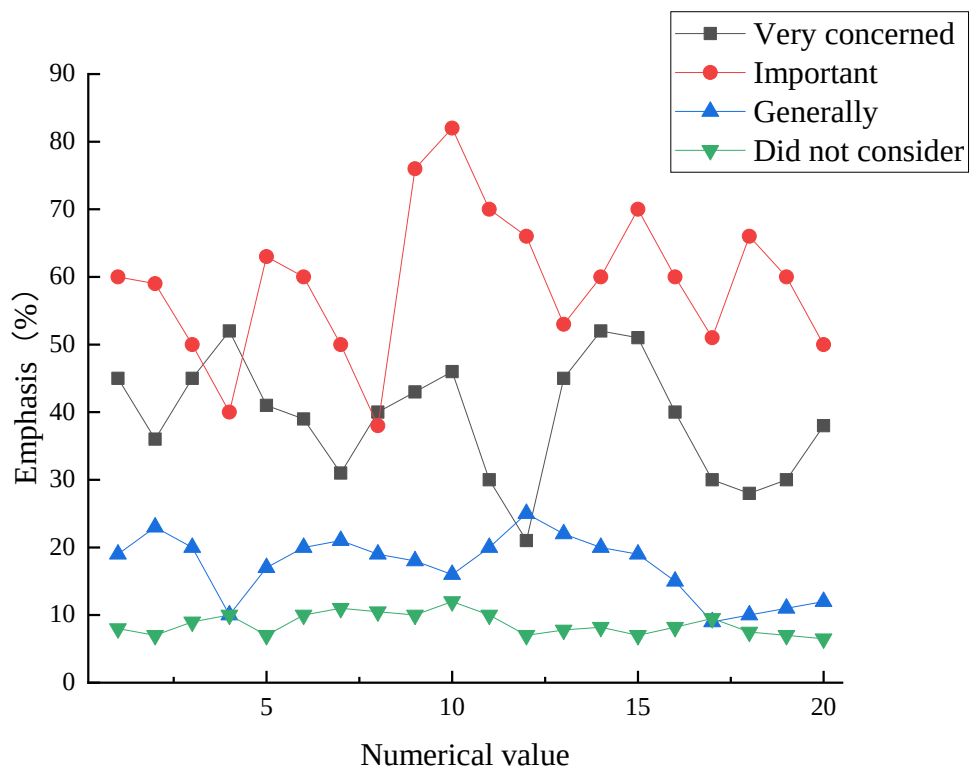


Figure 5: College graduates attach importance to career planning

The data show that college students generally attach great importance to the importance of career planning and have a strong demand for career planning. This reflects that students have basically realized that planning their career development direction is crucial to employment. However, on the other hand, many college students are relatively weak in receiving systematic and professional career guidance and training. This is partly due to the lack of time and effort invested in this area and the failure to meet some of the higher requirements and standards. This suggests that schools and society need to invest more resources in college students' career planning education, and help students systematically master the knowledge and skills required for career planning through professional training and economic support. It is of great significance to expand the employment horizon of college students and realize the effective docking of their self-value and social needs.

Conceptually speaking, college students' career planning belongs to the distant future planning. However, it is inseparable from the growth process of college students, and it needs to start from the correct ideological guidance and scientific planning. Therefore, it is a very important part of the current stage to help college students establish the correct career planning concept and form a good planning consciousness. However, there are still some major problems in the existing career planning education system of college students in China: First, the guidance of college students' growth planning has not been fully popularized and implemented. The career development guidance provided by many colleges and universities for college students is not comprehensive and specific, and has not really penetrated into the actual life of students. Secondly, the development of career planning courses in some local colleges and universities is not perfect, and some even do not offer relevant courses, which cannot provide reasonable and effective career guidance to college students. This is also a common problem faced by all colleges

and universities, that is, whether to give enough attention and investment in the career planning of college students. A survey shows that rational and promising careers have a high status among college students. Whether this reflects a certain deviation in students' career planning needs to be corrected by effective measures taken by the school, which is worth further research and discussion. Do you think that there are ideological deviations in college students' career planning? As shown in Figure 6.

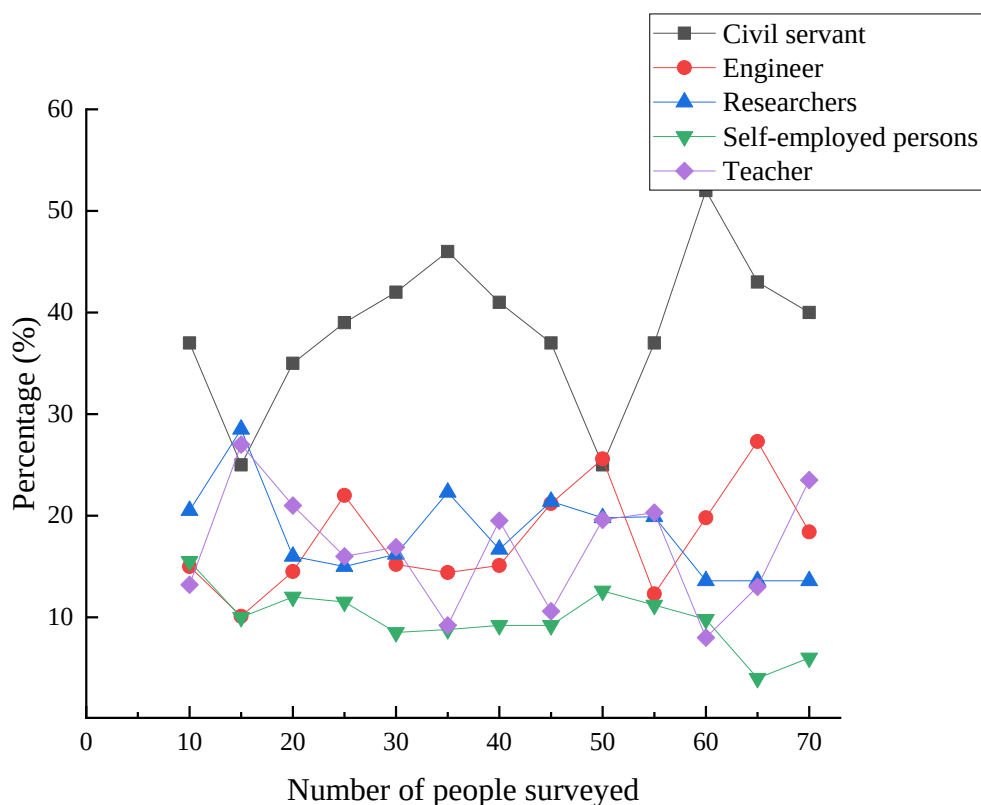


Figure. 6 There are conceptual deviations in college students' career planning

The survey found that many college students are more willing to engage in jobs related to mental work, believing that this kind of work is more honorable and valuable than manual work. To a certain extent, this reflects the misunderstandings existing in the career choice of college students. On the one hand, it is easy to lead to the limitations of college students' employment choices, which do not fully consider the actual demand of the labor market; On the other hand, it is also related to the influence of pragmatism and money worship in the current society. Many college students first consider the income situation, but ignore the personal career ideal and interest. Such short-sighted and drifting thoughts are not conducive to college students' scientific and reasonable career planning. The school and the society need to guide students to correctly understand the development prospects of all walks of life, establish correct professional values, and explore the career direction suitable for their own development on this basis. This is a direct and effective way to correct the deviation of college personnel training and promote the career development of college students. When college students find it difficult to find a job, they will seek the way as shown in Figure 7.

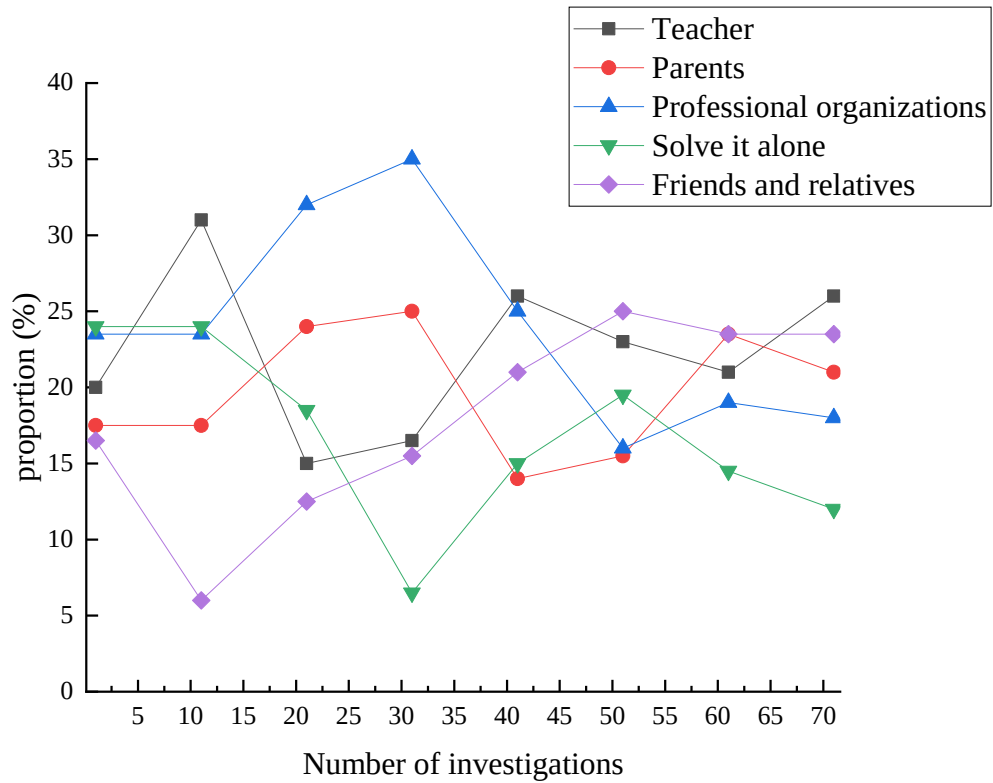


Figure 7. How college students seek help in finding jobs

According to the survey data, college students' self-consciousness in the process of career planning is relatively traditional, which is related to the insufficient guidance and lagging construction of colleges and universities in this field. The results show that it is necessary for colleges and universities to further strengthen and innovate college students' career planning education and improve their scientific planning ability.

Fundamentally, the emergence of this problem is related to the structural problems existing in the talent training mechanism of Chinese universities. Specifically, there is a tendency for colleges and universities to adjust their major Settings quickly depending on market hot spots, but this often leads to the blind allocation of educational resources, and it is difficult to take into account the development needs of college students. Due to the frequent changes in popular majors, students are likely to eventually face employment difficulties. In order to correct this kind of education distortion, colleges and universities should objectively analyze the long-term and stable talents demand in the society, and guide students to do a good job positioning early based on their own characteristics. On this basis, we should continue to increase the construction of career planning courses, connect professional learning with professional practice platforms, and comprehensively improve the employability and comprehensive quality of college students.

5. Conclusion

To sum up, college students generally attach great importance to career planning, but it is too idealistic, not strong in practice, and the planning effect is not high. It is mainly reflected in the deviation of college students' cognition of the career world and the lack of correct career orientation. This is closely related

to the lack of systematic and comprehensive career guidance for college students. In order to explore the effective path of college students' career planning, this paper constructs a prediction model based on grey system theory. The research shows that this model can simulate and predict the law of college students' career development well, especially suitable for small and medium-sized data scenarios, and has the characteristics of fast operation speed and high precision. However, the model itself also has room for optimization, such as adjusting key parameters, simplifying algorithms, and verifying big data to further improve the prediction accuracy.

Overall, this study preliminarily proves the feasibility of the career planning method of college students based on data algorithm. The follow-up research will continue to improve the model on this basis, and combine big data and artificial intelligence technology to explore a more scientific and reasonable career planning and guidance mechanism. It is of great significance to improve the quality of personnel training in Chinese universities.

In order to better guide the career development of college students, colleges and universities can build special career planning platforms and formulate systematic growth training plans to help students cope with employment problems smoothly. The organic combination of ideological and political education and career planning is an important content of this platform. Rich ideological and political education resources can help college students understand themselves correctly, establish a positive outlook on life, values and career choice ideas, so as to improve their comprehensive quality to a certain extent. At the same time, it is also conducive to further expanding and innovating the current path of ideological and political education. In the face of the new situation, colleges and universities should adopt a variety of ways and means to constantly explore new methods and ways of ideological and political education. It is one of the important measures to realize the goal of talent training to combine it closely with the construction of college students' career planning. Through moral cultivation and quality training, help college students to establish good professional quality; Stimulate the vitality of ideological and political education resources through career planning and guidance. This is an important starting point for deepening the development of college students at present and in the future.

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