

# The Impact of Social Networks on Young People's Job Search Performance

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**Abstract.** This study focuses on the impact of social networks on young people's job search performance. Based on the decision tree classification model, this study first explores the social network behavior characteristics of job-seekers in job search. It was found that the job search behaviors of young job seekers in social networks varied widely. It not only reflects the psychological tendency of blindly seeking social network support, but also shows the obvious fact of low utilization of social network resources. Through the decision tree regression model, this study explored the impact of youth social network behavior on career search performance. The model shows that the factors of kinship network have a great influence on career search performance, while the factors of career network have the least influence on young people's career search performance. This study is of practical significance to explore more effective ways of obtaining career information and to enhance the career search performance of young people.

**Keywords.** social network, career search performance, decision tree model

## 1. Introduction

Figures released by the National Bureau of Statistics of the People's Republic of China show our youth unemployment rate climbed to 20.4% in the year to April<sup>3</sup>. This means that about 21 out of every 100 young people in the 16-24 age range are involuntarily unemployed, excluding students in school. Add in the 11.58 million college graduates who will soon graduate from the 2023, and our youth unemployment rate rises to an even more worrying high.

There are three types of youth unemployment in China. One is cyclical unemployment caused by the economic downturn, which is mainly governed by expansionary fiscal, monetary and balance-of-payments policies, and the other is frictional unemployment caused by job-hunting, the main mitigation measures are to enhance the symmetry of employment information and promote employment flexibility;

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3 National Bureau of Statistics of the People's Republic of China. National Economic Performance continued to improve in April. [http://www.stats.gov.cn/sj/zxfb/202305/t20230516\\_1939486.html](http://www.stats.gov.cn/sj/zxfb/202305/t20230516_1939486.html), 2023.5.16.

and thirdly, structural unemployment resulting from the mismatch between the structure of formal education and the demands of the job market, the focus of the adjustment is to continue to implement supply-side reform in the field of education and industrial structure. Concrete to the field of education is to optimize the structure of education, improve the quality of education. It can be seen that the governance of youth unemployment needs a four-way linkage among the state, enterprises, individuals and society. This paper will focus on the individual's behavior motivation, action mechanism and action effect under the situation of frictional unemployment, and hope to obtain new findings with practical significance and theoretical value.

According to the Theory of Job Search, if the length of job search is taken as the independent variable and the salary level is taken as the dependent variable, there will be an ideal length of job search, which will make the salary level of job seekers reach the optimum. The length of job search is determined by the quantity and quality of job information. Online recruitment can greatly increase the amount of job information, but it has no significant effect on job seekers' job search performance. The promotion of career search performance needs to be based on the social network of Job Seekers[1].

Job search performance refers to job seekers in the process of job search behavior and behavior results. According to the two-dimensional structure model proposed by Borman & Motowidlo (1993) [2], job search performance can be divided into task performance and peripheral performance. The task performance indicators of career search mainly measure the frequency, quality, cost and timeliness of career search behavior. The peripheral performance of job search mainly refers to the job seekers' spontaneous interpersonal behavior, volitional behavior and quality performance, which is beneficial to the task performance. Peripheral performance can be subdivided into two sub-dimensions: interpersonal promotion and career search dedication. Interpersonal promotion examines individuals' behaviors that consciously enhance their interpersonal relationships related to job-hunting, such as promoting cooperation, helping students to complete job-hunting tasks, and removing factors that hinder career search performance. Career search dedication examines the self-discipline of job seekers, such as search efforts, expectations of success and job-hunting attitude[3].

The theory of weak-strong relationship is the classical research of social network in the theory of career search. Granovetter's (1973) weak-relation theory holds that strong-relation is the link between similar people within a group, so the information obtained through strong-relation is more repetitive, while weak-relation is cross-group, connecting dissimilar individuals[4]. In other words, weak relation is an information bridge between different groups. His empirical study of white-collar job-hunting in Newtown, Boston, found that when individuals used their social networks to seek employment, they were more likely to succeed through weak connections than strong ones. Bian Yanjie (1988) put forward the strong relation theory based on the study of Tianjin area[5]. In developed market countries, weak relationship plays a decisive role in job-hunting, but in China, some parts of job information show obvious asymmetry, strong relationship will have a significant effect on career search performance.

This paper focuses on the impact of social networks on job search performance in China. This study focuses on the current high youth unemployment in China's realistic problems; This paper attempts to achieve the research goal by exploring the interrelation between the strong-weak relationship theory and the youth frictional unemployment governance (improving the career search performance). The sample of this paper is

college graduates who are newly employed and young employees who have been employed for three years. It is expected that the following questions can be explained by quantitative research. (1) do each level or node of Chinese youth's social network have a consistent or differential effect on their self-perceived career search performance? (2) which factors have a significant impact on determining career search performance?

In this study, we will use decision tree classification model to describe the characteristics of Chinese youth social networks, and use decision tree regression model to determine the role of social networks on Chinese youth career search performance. Most of the previous empirical studies used linear statistical models to describe the impact mechanism. But in reality, social network may form more complex influence mechanism and action line to the job search performance of young people, and the decision-making of the sample of job seekers may also appear many kinds of natural states, the various action routes of social network will present complex expectation sets in different states of job seekers. In this study, we use decision tree classification and decision tree regression methods, through the introduction of machine learning research tools can effectively improve the research and reality of the degree of fit and accuracy. Based on the innovation of research methods, new data interpretation and research conclusions will be formed, and then fill some gaps in the research direction.

This study is mainly based on the mosaic structure of social networks and small group theory to cognize the social network information of young job seekers.

The following will explain the core content of the two theories, and then introduce the measurement tools of social network information.

## **2. Research Theory and Measurement Tools**

There is not much research on the impact of social network on the quality of job search or employment in China. Representative studies include: Ding Shulei and Liu Cuihua (2022) point out that Internet use and social networks not only directly and positively affect the quality of employment, but also can indirectly improve the quality of employment through the enhancement of social networks[6]. Pan Liqun and Zhang Shaohua (2022) argue that the impact of social networks on the labour market is uncertain. For migrants, the study found, wages earned through social networks fell by several percentage points and the quality of job searches declined. The reason is that these migrants are attached to a relatively low-level social network, which can not guarantee the quality of employment, and therefore can not provide satisfactory jobs for people, improve job search performance[7].

Based on the mosaic structure of social networks and the theory of small groups, this research will design a questionnaire.

### *2.1 Social network theory and measurement tools*

#### *2.1.1. The mosaic structure of social networks*

In the Information Age, the social network which plays a supporting role is a multi-node complex network when the contemporary Chinese youth search for jobs. The individual

who carries on the occupation search is in essence embedded in the social occupation search network by a regional "Cluster" structure. Clusters may be manifested as peer clusters, kinship clusters, geographic clusters, karma clusters, and so on, and the composition of individuals in these clusters is quite different, they may be distributed in different industries, different classes, and so on, clusters also vary in size[8].

In career searching, it is likely that the searcher will have stronger connections with a relatively small number of neighbors in the cluster. The smallest social structure that an individual can inlay is duality[9]. If the directed relationship is taken into account (that is, A wants B to help her with her career search, but B is unwilling to help her with her career search), then three dual relationships will arise in the career search, A and B can't connect in Job Search, A connects B but B doesn't connect A, A connects B and B connects A. Obviously, only A and B two-way connections can produce "Reciprocity" in career search. This directed "Triple" represents the degree of social capital, cluster cohesion and trust intensity of the minimum mosaic structure in the complex network of career search.

### *2.1.2. Small group theory*

According to the small group theory, career search is a typical social structure problem, and the study of career search performance can be derived from the triad.

For undirected relationships, there are two possible connections in career search behavior: duality and structure hole (one actor connects at least two disconnected actors). This is very much the case with online investment banks. However, the information transmission chain of this kind of job search is too short, and the probability of realizing effective job search is low.

For a directed relation, a transitive triplet, the typical relation pattern is a-connected b, b-connected C, C-connected A. This mode of transmission can be considered as a state of equilibrium, in which career search will achieve effective closure of information. This is also the shortest path for an agent (such as a recruiter) to search for a career in an agency. If the high-density connected nodes of job seekers do not provide job information to the relevant people, whether or not the searchers in this small group in the nuclear position, he can not get valuable career information and high search performance from this small group.

In reality, the basic structure of career search behavior will go far beyond the triple structure model. Social network theory suggests that career search will take the form of small-world networks. The characteristics of small-world networks are the shortest path of small networks and large clustering coefficients. Based on the self-organization of the small-world network, the self-evolution of individual network structure and self-seeking social order will inevitably affect job seekers' career search performance[10].

### *2.1.3. Measurement tools for social networks*

This study deconstructs the social networks that Chinese youth support their career search into "Social network", "Internship network", "Peer network", "Kinship network", "Geographical network" and "Career network". Among them, the scope of social network includes all kinds of clubs inside and outside the school, such as student clubs

inside the school, professional clubs outside the school (such as hip-hop training institutions, Java training institutions, etc.) ; The internship network mainly refers to the interpersonal network formed during various types of short-term internships (including school Diligent Work-Frugal Study Movement) ; Peer network node mainly refers to the social network formed when job seekers and teachers, students in the same class, students in the same major, and members of the same department study or live in the same time and space The consanguineous network mainly covers the network structure of communication between job seekers and their relatives, while the geo-network mainly refers to the network formed by the personal interaction between job seekers and their fellow townsmen in their spare time outside of work and daily life, as the township tour group, the network mainly refers to the job seekers to participate in the work exchange or business exchange meeting with non-staff of the social network formed.

Characteristics of job seekers' job search behavior in six types of social networks, on the basis of the four-dimensional scale published by Zhou Xing, this study compiled a questionnaire, which was based on "Social network", "Internship network", "Peer network", "Kinship network", "Geographical network" and "Professional Network", six social network scales[11]. The scale is developed for youth social network behavior, and its reliability and validity are tested by Chinese sample. Among them, the network center factor and the network connection intensity factor describe the information aggregation density and the information aggregation intensity of Job Seekers in the social network respectively; Network heterogeneity factor and network dynamic factor describe the static and dynamic characteristics of the spatial structure of Job Seekers' social network respectively.

**Table 1.** Supports the social network characteristics of job search behavior

Questions	
Network centrality factor	1 I can quickly get job information from others. 2 I can get more information from social networks than anyone else. 3 I am in a resource-dominated position in my social network. 4 I can get people, money and things support from others quickly. 5 I have influence in my social network. 6 I keep in touch with most of my classmates.
Network connection strength factor	1 I have frequent contact with people in my social network. 2 I spend a lot of time with people in my social network. 3 I have a close relationship with people in my social network. 4 I have deep feelings with people in my social network. 5 People in my social network and I often help each other. 6 I often share information and resources with people in my social network. 7 Important friends have helped me a lot in my career and personal development.
Network heterogeneity factor	1 The professional backgrounds of people in my social network are widely distributed. 2 People in my social network work in a wide range of industries. 3 The positions of people in my social network vary greatly. 4 People in my social network are widely distributed. 5 People in my social network have a great age span. 6 The education level of people in my social network is very different.

Network dynamic factor	1 I can make many new friends every year.
	2 The composition of my social network has changed greatly.
	3 The friend I met three years ago is still in contact with me.
	4 I take the initiative to keep a good relationship with my friends.
	5 I will try my best to get in touch with my lost friends again.
	6 I can get the support and help from insiders quickly and conveniently.

2.2 Job search performance measurement tool

The job search performance scale is divided into task performance scale and peripheral performance scale. Task Performance Scale is a semantic supplement based on the scale developed by Zheng Bojing and Fan Jingli. The peripheral performance scale is in Stephan J. Motovidlo and James R. Based on the scale developed by Van Scotter, the semantic supplement of the table is made. The scale is developed for job search performance, and its reliability and validity are tested by Chinese sample.

Table 2. Job search performance scale

Task performance	Peripheral performance scale	
	Interpersonal facilitation dimension	Job search dedication dimension
1 I succeeded in finding a very satisfactory job.	1 I share my job information and experience with my classmates.	1 I use my leisure time to do things related to job hunting.
2 All my efforts in job hunting can be rewarded.	2 When my classmates encounter difficulties in finding a job, I offer help.	2 I pay attention to the important links in the job hunting process.
3 I am one of the best graduate job seekers in the college (major).	3 I give support or encouragement to my classmates when they encounter difficulties in finding jobs.	3 I work very hard to find a job.
4 Generally speaking, the signed work is consistent with my expectations.	4 I will praise and congratulate my classmates when they are successful in job hunting.	4 I like to seek challenges in job hunting.
	5 I take the initiative to establish and maintain a good relationship with the employer.	5 In the job search, I do well the requirements put forward by the employer.
		6 I can take the initiative to solve problems in job hunting.
		7 I can persist in overcoming all kinds of difficulties in order to find a satisfactory job.
		8 My attitude towards job hunting is exceptionally positive and enthusiastic.

In a word, based on the mosaic structure theory of social network, Chinese youth's job search behavior is embedded in the whole social job search network by their own social network. Therefore, the questionnaire deconstructs the social network of Chinese youth into "Social network", "Internship network", "Peer network", "Kinship network", "Geographical network" and "Career Network".

Based on the small-group theory, the basic structure of job search is a simple three-tuple structure, from which various small-group structures can be evolved. The evaluation dimensions of small group structure can be divided into network center factor, network connection strength factor, network heterogeneity factor and network dynamic factor.

Based on the above theories, this paper revises Zhou Xing's four-dimensional questionnaire as a research tool to measure the social network characteristics of Chinese youth in job search.

This paper agrees with Zheng Bojing, Fan Jingli, Stephan J. Motovidlo and James

R. Researchers such as Van Scotter designed the questionnaire to divide job search performance into task performance and contextual performance.

The above two scales can help this study to obtain quantitative data on the impact of social networks on job search performance of young job seekers in China.

### 3.Data Analysis

In this study, random sampling method was used to conduct a small-scale online questionnaire survey. The questionnaire was randomly distributed through online platform Rakuten Insight to ensure the scientific nature of random sampling. The questionnaire was randomly distributed through online platform Rakuten Insight to ensure the scientific nature of random sampling. The reason for using random sampling is (1) because of the large scale and uncertain structure of the study, we can not use stratified sampling, systematic sampling and other sampling methods. (2) the sample in this study is not rare, so no snowball method is needed to obtain the data. Therefore, this paper collects data by random sampling on network platform.

The sample is limited to first-time employed college graduates and young employees within three years of their entry into the workforce. A total of 352 valid questionnaires were collected. Among them, there were 206 males and 146 females, 316 Hans and 36 ethnic minorities, 75% of them had bachelor degree or above, 25% of them had less than bachelor degree 21.31%, 28.69%, 41.76% and 8.24% of the samples came from the provincial capital and above, prefecture-level cities, county-level towns and rural areas, respectively.

#### 3.1 the characteristics of social network of young job seekers

In this study, the decision number classification model is established by training set data, and the decision tree structure is obtained. Decision tree algorithm is a method to approximate the value of discrete function. Decision tree construction can be done in two steps. The first step is the generation of decision tree: the process of generating decision tree from training sample set. In general, the training sample data set is a historical and comprehensive data set for data analysis and processing according to the actual needs. Second, decision tree pruning: decision tree pruning is the process of checking, correcting and pruning the decision tree generated in the previous stage, the main idea is to cut off the branches that affect the accuracy of the prediction by using the initial rules generated in the process of building the validation decision tree from the new sample data set (called the test data set). The decision tree algorithm has the advantages of high classification precision, simple generated patterns and good robustness to noisy data. It is one of the most widely used inductive reasoning algorithms[12].

A decision tree is established to calculate the importance of features. The decision tree classification model is applied to the training and test data, and the classification evaluation results of the model are obtained. At each decision node, the selected segmentation features determine the final classification results. The training time was 0.069s, the data segmentation parameter was 0.8, the evaluation criterion of node split was Gini, the selection criterion of feature split points was best, the minimum number of

samples of internal node split was 2, the minimum number of samples of leaf node was 1, and the training time was 0.069s. The maximum number of leaf nodes is 50.

Table 3 shows the classification criteria for the computer-trained test set. Based on the single dimensions of gender, nationality, highest education, region of origin, family economic status and family structure, the accuracy rate, recall rate, accuracy rate and f1 value of job search behavior in social network center factor, intensity factor, heterogeneity factor and dynamic factor were all over 0.814. This means that the decision tree is used to describe the social network behavior of youth in career search, which is more closely related to the reality. The social network features generated by decision tree model approach the real situation.

**Table 3.** the fit degree of social network behavior of youth occupation search

Gender	Accuracy recall accuracy	Accuracy recall accuracy	Accuracy recall accuracy	F1
Gender-social network test set	0.979	0.979	0.979	0.979
Highest education-social network test set	0.872	0.872	0.873	0.87
National-social network test set	1	1	1	1
Sample Source Region-Social Network Test Set	0.883	0.883	0.885	0.881
Family economic situation-social network test set	0.815	0.815	0.819	0.814
Family structure-social network test set	1	1	1	1

From Table 4, we can see that, firstly, in the single dimension of gender and nationality, the central factor, intensity factor, heterogeneity factor and dynamic factor of social network have different influence on the score of job search behavior. For example, if you look only at the highest level of education, the geo-network-centric factor accounted for 15.7 per cent of the influence in job search among young job seekers, while the internship-network-centric factor accounted for only 11 per cent. The results show that if we can predict the behavior of job seekers with different educational levels in job search, we should first look at the behavioral characteristics of job seekers who use their hometown relationship to seek jobs, rather than the characteristics of their job-seeking behavior in the internship unit; similarly, if the job-seeking performance of job-seekers with different single dimensions is predicted, firstly, we should look at the following factors: Gender-internship network center factor (18.8%) , nationality-peer network dynamic factor (12.3%) , origin region-kinship network center factor (14.3%) , family economic status-peer network heterogeneity factor (9.3%) , family structure-kinship network center factor (19.3%) . Second, there is no obvious difference in the importance of the characteristics of each social network factor, and there is no obvious rule in the order of importance. This means that traditional methods based on linear statistical models should not be used to assess the impact of social networks on young people's career search performance. For the extremely complex social network, the econometric model based on computer learning should be used to evaluate or predict the analysis.



**Table 4.** the importance of social network behavior characteristics of youth job search

	Gender	Nationality	Highest educational background	Geographical	Family economic status	Family member structure
Community network center factor	0.046	0.053	0.019	0.1	0.032	0.059
Community network strength factor	0.052	0.016	0.038	0.048	0	0.035
Heterogeneity factor of community network	0.049	0	0.018	0.033	0.016	0.044
Dynamic factors of community network	0.065	0.08	0.012	0.05	0.035	0.03
Practice network center factor	0.188	0	0.11	0.018	0.082	0.066
Internship network intensity factor	0.018	0.087	0.086	0.082	0.016	0.044
Heterogeneous factors of internship network	0	0.074	0.033	0.013	0.036	0
Dynamic factors of internship network	0.007	0	0	0.032	0.049	0.027
Peer network center factor	0.037	0.092	0.028	0.051	0.05	0.013
Peer network strength factor	0.006	0	0.047	0	0.091	0.012
Peer network heterogeneity factor	0.052	0	0.047	0.056	0.093	0.012
Peer network dynamic factor	0	0.123	0.029	0.067	0.043	0.024
Kinship network center factor	0.085	0.089	0.088	0.143	0.014	0.194
Affinity network strength factor	0.086	0.029	0.041	0	0.05	0.041
Heterogeneous factor of genetic network	0.023	0.065	0	0.011	0.016	0.025
Genetic network dynamic factor	0.01	0	0	0.012	0.064	0.003
Geo-network center factor	0	0.02	0.157	0.015	0.076	0.003
Geo-network intensity factor	0.079	0	0.015	0.044	0.033	0.036
Geo-network heterogeneity factor	0.012	0.065	0.015	0.03	0.021	0.007
Geo-network dynamic factor	0.049	0	0.038	0.029	0.076	0.046
Industry edge network center factor	0.012	0.011	0.06	0.049	0	0.05
Industrial edge network strength factor	0.104	0.119	0.04	0.07	0.017	0.135
Heterogeneous factors of industrial network	0.019	0.029	0.034	0.019	0.057	0.045
Dynamic factors of industrial network	0	0.05	0.044	0.029	0.032	0.048

3.2 the impact of social networks of young job seekers on job search performance

In this study, decision number regression model was established by training set data. The training time was 0.115s, the data segmentation parameter was 0.8, the node split evaluation criterion was Friedman's feature partition point selection criterion was best, the minimum sample number of internal node split was 2, the minimum sample number of leaf node was 1, the minimum sample number of internal node split was 2, the

minimum sample number of internal node split was 1, the minimum sample number of internal node split was 1, the minimum sample number of internal node split was 1, the minimum sample number of internal node split was 2, the minimum sample number of internal node split was 1, the minimum sample number of internal node split The maximum depth of the tree is 10; the maximum number of leaf nodes is 50.

Table 5 shows the indicators of predictive evaluation. If MSE (mean square error), RMSE (root mean square error), MAE (mean absolute error) three indicators of measurement, the smaller the value, the higher the accuracy of the model. Based on this, the precision of network center factor-task performance model is relatively high. If the MAPE (mean absolute percentage error) is measured, the smaller the value is, the higher the accuracy of the model is, and the network heterogeneity factor-peripheral performance test set model has the highest accuracy.<sup>4</sup> If we compare the predicted value with the mean value only according to  $r^2$ , the model accuracy is higher when the result is closer to 1, then the model accuracy of network heterogeneity factor-peripheral performance is higher. Therefore, for the two complex behavioral systems of social network behavior and career search performance behavior, different models may be used to get different precision prediction models.

**Table 5.** the model accuracy of the effect of social network behavior on young people's job search performance

	MSE	RMSE	MAE	MAPE	R <sup>2</sup>
Network Centrality Factor-Task Performance Test Set	4.135	2.033	1.534	11.077	0.759
Network Center Factor-Peripheral Performance Test Set	20.945	4.577	3.585	8.459	0.806
Network Intensity Factor-Task Performance Test Set	4.192	2.047	1.593	11.539	0.756
Network Intensity Factor-Peripheral Performance Test Set	21.894	4.679	3.72	8.735	0.797
Network Heterogeneous Factor-Task Performance Test Set	5.02	2.241	1.758	12.58	0.708
Network Heterogeneity Factor-Peripheral Performance Test Set	20.504	4.528	3.599	8.368	0.81
Network Dynamic Factor-Task Performance Test Set	4.262	2.064	1.613	11.312	0.752
Network Dynamic Factor-Peripheral Performance Test Set	22.055	4.696	3.662	8.613	0.795

Table 6 shows that social network centrality factor, intensity factor, heterogeneity factor and dynamic factor have some influence on job search performance, such as task performance and contextual performance. In particular, the central factor, intensity factor, heterogeneity factor and dynamic factor in the kinship network appeared in the most influential position six times in the two dimensions of task performance and peripheral performance. This means that when young people do job search, there is a significant co-progression relationship between their search performance and their behavioral status in

4 MSE (Mean Square error): the expected square of the difference between predicted and actual values. The smaller the value, the higher the accuracy of the model.  
RMSE (Root-mean-square error): the square root of MSE, the smaller the value, the higher the accuracy of the model.  
MAE (Average absolute error): the average of absolute errors, can reflect the actual situation of the forecast error. The smaller the value, the higher the accuracy of the model.  
MAPE (mean absolute percentage error): a distortion of Mae, which is a percentage value. The smaller the value, the higher the accuracy of the model  
R<sup>2</sup>: The closer the prediction is to 1, the more accurate the model is.

kinship social networks. The more frequently young people contact their relatives, live in the information hub among their relatives, the more people from all walks of life among their relatives, and the higher the density of their relatives' networks, etc.. On the contrary, each factor of karma network appeared in the weakest position 3 times. This means that stronger social networks among peers do not improve job seekers' job search experience. Therefore, it can be inferred that when young people search for jobs, peers are more competitive, and social networks formed by peers have a weaker effect on young people's job performance.

**Table 6.** the characteristic importance of social network behavior to youth career search performance

Item	Task performance	peripheral performance	Item	Task performance	peripheral performance
Community network center factor	0.166	0.225	Community network strength factor	0.159	0.082
Community heterogeneous intensity factor	0.165	0.118	Dynamic factors of community network	0.116	0.086
Practice network center factor	0.167	0.094	Internship network intensity factor	0.085	0.113
Heterogeneous factors of internship network	0.227	0.179	Dynamic factors of internship network	0.157	0.28
Peer network center factor	0.254	0.11	Peer network strength factor	0.184	0.136
Peer network heterogeneity factor	0.129	0.223	Peer network dynamic factor	0.147	0.068
Kinship network center factor	0.128	0.282	Affinity network strength factor	0.255	0.339
Heterogeneous factor of genetic network	0.342	0.228	Genetic network dynamic factor	0.227	0.219
Geo-network center factor	0.104	0.112	Geo-network intensity factor	0.158	0.202
Geo-network heterogeneity factor	0.077	0.137	Geo-network dynamic factor	0.149	0.173
Industry edge network center factor	0.181	0.178	Industrial edge network strength factor	0.16	0.127
Heterogeneous factors of industrial network	0.059	0.116	Dynamic factors of industrial network	0.205	0.173

3.3 Results

First, the social network characteristics of the sample of job-seekers are found by classifying the decision-making based on gender, nationality, the highest educational

level, the region of origin of students, the economic status of families, and the structure of family members, there are obvious dynamic characteristics of weak network connection in three aspects: the dynamic factor of internship network, the strength factor of peer network and the dynamic factor of kinship network. Second, kinship network factor is the most important factor affecting the job search performance of young people.

#### **4. Conclusion and Enlightenment**

This study focused on the social network characteristics of youth in job search. The decision tree model is used to describe the social network characteristics of young job seekers in a profound and detailed way. It is found that social network is a typical complex network. The job-seeking behaviors of young job-seekers in social networks are different. In the aspect of seeking support from social network resources, most of them reflect the psychological tendency of unfocused, wide-cast net and blind, about 80% of the social network factors constitute the characteristics of young people's job search behavior. The data also show that few people are able to make full and comprehensive use of all social network resources. For example, some people can become the information center of a network, but the intensity of the exchange of information may be low. This means that young job seekers can not take into account all the career information provided by social networks. Therefore, the social network characteristics of young job seekers can not be delineated by linear statistical model.

This study focuses on the impact of youth social network behavior on career search performance. Through the decision tree model, the prediction model with high precision is obtained. The model shows that each factor of kinship network has a greater impact on career search performance. During the period of career search, young people will also have better career search performance if they are closely connected with their kindred network. On the other hand, the influence of the factors of career network on the job search performance of young people is the least close. This has two contrasting implications. One possibility is that the young person's job search performance is mediocre, possibly because he does not have the resources to tap into his network of connections; another possibility is that, because of the competition among peers, there are many barriers in the exchange of resources among the nodes in the industry-related network, so it is not effective to improve the career search performance through the industry-related network.

In short, social networks have a complex effect on young people's job search performance. A deep understanding of the characteristics of social network resources can help young job seekers to explore more effective ways to obtain career information, and thus effectively improve the job search performance of young people.

#### **5. Research Respect**

This research has formed the preliminary cognition to the Chinese youth social network behavior characteristic. The behavioral characteristics in social networks have distinct Chinese characteristics, that is to say, the professional search performance of Chinese

youth has an obvious mapping relationship with their behavioral characteristics in kinship networks. This conclusion forms a support for the strong-relation theory. This poses a challenge to the weak-relation theory based on western samples. However, there are some limitations in this study, such as the small number of samples, the structure of the sample is not ideal, the sample does not cover the youth employment of non-college students and so on. In the future, this research will focus on expanding the sample space and optimizing the data collection methods, hoping to obtain more theoretical and practical significance of the findings.

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