



A Three Dimensional Matrix Study on the Employment Competence of College Students

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Abstract. Against the backdrop of China's national strategy of employment and talent development, our team has explored and studied the needs of China's socio-economic development in the post pandemic era, and determined a research topic mainly focused on improving the employment competence of college students.

We have introduced three related concepts: college student employment competence, college student employment satisfaction, and enterprise employment satisfaction, using literature research methods, questionnaire research methods Structured interview method and other methods were used to obtain data from 118 universities, 177 household units, and 10000 college students. SPSS software was used for reliability and validity analysis, difference analysis, correlation analysis, regression analysis, and other quantitative analysis, A three-dimensional matrix model is established based on the relationship between the five dimensions of college students' employment competence (practical ability, social cooperation ability, learning ability, self planning ability, and achievement motivation) and their employment satisfaction and the satisfaction of employers. This article found the following problems through research:

1. College students have unclear self planning; Weak subject consciousness;
2. The learning ability is not systematic; Limited knowledge;
3. Weak practical ability; Mismatch with employment needs.

Keywords: Quantitative analysis of employment competence and job satisfaction

1 Introduction

1.1 Research Background

In recent years, the number of graduates in China has been increasing year by year. In addition to the impact of the previous epidemic, the total number of unemployed peo-

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Y. Chen et al. (eds.), *Proceedings of the 2023 2nd International Conference on Public Culture and Social Services (PCSS 2023)*, Advances in Social Science, Education and Humanities Research 787,

https://doi.org/10.2991/978-2-38476-130-2_50

ple, newly unemployed people, and newly added college graduates in the labor market has been continuously increasing; However, the demand for job recruitment in enterprises has significantly decreased, and the labor market supply far exceeds demand. On the other hand, enterprises need more high-quality and high-level talents. The structural contradiction of coexisting difficulties in recruitment and employment is also the main contradiction in the field of employment. It is crucial to increase the 'employment competence' of college students in order to promote the development of the country's core competitiveness.

1.2 Research significance

Under the policy of improving the national employment promotion mechanism, it is an urgent task for society to ensure the effective and high-quality connection between college students and job positions, ensure the multi-dimensional improvement of college students' employment competence, and enable talents to fully realize their own value, in order to promote high-quality and full employment of college students. At the same time, improving the employment competence of college students to meet the employment standards of enterprises, making their employment competence meet the requirements of their positions, and increasing the employment satisfaction of enterprises. Achieving such an effect is a fundamental requirement for sustainable and high-quality development of society. [8]

1.3 Innovation points

1.3.1 Combining with the hot topics of the 20th National Congress and the Two Sessions.

Employment is the foundation of people's livelihood. The report of the 20th National Congress of the Communist Party of China pointed out that to strengthen employment priority policies and improve employment promotion mechanisms, it is necessary to highlight the employment orientation of economic development, based on China's special resource endowment, fully leverage the huge advantages of abundant human resources, and promote the formation of a virtuous cycle of high-quality development and employment expansion and improvement, promoting mutual promotion and progress.^[3]The research on the employment competence of college students in this project is in line with the theme of the times and has important significance for improving high-quality employment.

1.3.2 Tripartite linkage and bidirectional lifting

Based on a survey of 118 universities and 177 enterprises in 18 industries, with a total of 10000 college students, it was found that the improvement of college students' job competence can promote the improvement of college students' job satisfaction. College students' job satisfaction has a positive impact on the satisfaction of corporate employment, and the improvement of corporate employment satisfaction has prompted most companies to provide material and spiritual rewards to employees,

And such rewards objectively encourage employees to continuously improve their employment competence to maintain their personal competitiveness in the enterprise^[7].

With the joint efforts of enterprises, universities, and college students, employment satisfaction and employment satisfaction have achieved a two-way improvement, and the three aspects of college students' employment competence, employment satisfaction, and employment satisfaction have also reached a virtuous cycle.

1.3.3 Construction of the "Three Elements, Four Blends, and Five Dimensions" Model

Under the guidance of the 20th National Congress and the Two Sessions, this article proposes a series of concepts such as "three elements", "four integrations", and "five dimensions". The project will closely connect college graduates, employers, and schools (three elements) to form a closed loop, leverage the comprehensive advantages of "industry, academia, and research", build a mechanism for joint construction and sharing of school enterprise faculty, and form a new model of school enterprise cooperation; ^[5]We have implemented a talent cultivation path of integrating expertise and innovation, industry and innovation, ideological and political integration, and competition and innovation (four integrations), leveraging the strategy of building a strong country with talents and practicing the theory of modernization and talent construction; We divide the five dimensions of college graduates' competence into practical ability, social cooperation ability, learning ability, self planning ability, and achievement motivation (five dimensions), thereby enhancing college students' active learning and practical ability. Build a "three element, four integration, and five dimensional" model.

2 Research Design

2.1 Research framework

The research approach of this study is project origin, background, and significance → determining the subject, framework, and approach → constructing a theoretical model → conducting empirical analysis and testing → proposing policy recommendations.

2.2 Research Implementation

The subjects of this survey are divided into two categories. And literature research, in-depth interviews, and questionnaire surveys were used. In terms of investigating the employment competence and satisfaction of college students, a questionnaire survey was conducted on 118 universities across the country, mainly targeting students with internship or work experience. In terms of investigating employee satisfaction among enterprises, 177 household employment units from nearly 18 industries, including agriculture, forestry, animal husbandry, fisheries, mining, manufacturing, construction, wholesale and retail, were selected for enterprise interviews, including

state-owned enterprises, large and medium-sized, small and medium-sized private enterprises, individual businesses, foreign-funded enterprises, and other different types of enterprises, to ensure the authenticity of the survey data.

2.3 Survey Methods

2.3.1 Literature research method

Before the formal investigation, in order to have a deeper understanding of the research topic and make the research scientific and reasonable, a copywriting survey method was adopted. Computer retrieval was used to search for literature on college students' employment competence, employment satisfaction, and enterprise employment satisfaction through knowledge and literature platforms such as CNKI and Wanfang. A series of information with important guiding significance for our group's research was obtained as reference materials.

2.3.2 Deep Interviews

Due to the fact that this article is based on the research on the two-way improvement of college students' employment competence and enterprise employment satisfaction, online interviews were used to gain a more comprehensive and in-depth understanding of college students' employment competence, and important information was discovered during interviews and conversations. The interviewees are enterprise management or human resource managers, while the other interviewees are leaders of relevant departments such as universities and governments. The team aims to collect more information within a reasonable range to achieve the research objectives of this project.

2.3.3 Questionnaire survey method

This group mainly used web questionnaire survey and email survey during the pre survey. The formal survey obtained the original data of the survey by combining online and offline questionnaire distribution.

3 Problem analysis and summary

3.1 Problem Analysis

Through reliability analysis, the overall standardized reliability coefficient is 0.965, with a range of values between 0 and 1. The closer it is to 1, the higher the reliability. The result of this analysis is 0.965, indicating that the overall reliability of the questionnaire is very high.

The validity analysis further verifies the reliability and feasibility of the model. According to the results of exploratory factor analysis, it can be seen that the coefficient result of the KMO test is 0.92, and the coefficient range of the KMO test is between 0 and 1. The closer it is to 1, the better the validity of the questionnaire^[4].

And SPSS was used for correlation analysis, difference analysis, regression analysis, and validation of the relevant hypotheses proposed in the study. The results obtained

through a series of data analysis are basically consistent with the assumptions, further demonstrating the reliability and feasibility of the model.

According to the analysis, there are shortcomings in practical ability, self planning, and learning ability among college students.

3.2 Problem Summary

The reliability and feasibility of the model were further verified through reliability and validity analysis. We conducted correlation analysis, difference analysis, regression analysis, and validation of the relevant hypotheses proposed in SPSS. The results obtained through a series of data analysis are basically consistent with the assumptions, further demonstrating the reliability and feasibility of the model.

During the research process, we also summarized some issues regarding employment competence, job satisfaction, and employer satisfaction among enterprises and college students. There are three points in total^[2]:

- The scientific, strategic, and forward-looking nature of college students' career planning is not strong.
- Insufficient learning ability and relatively single knowledge structure.
- Disjunction between practical ability and social needs.

4 Conclusion and suggestions

Under the guidance of the 20th National Congress and the Two Sessions, this article integrates a systematic concept of "three elements", "four integrations", and "five dimensions", and establishes a three-dimensional matrix model to enhance the employment competence of college students and the satisfaction of employers. The article will closely connect college graduates, employers, and schools, leverage the comprehensive advantages of "industry, academia, and research", construct a mechanism for co construction and sharing of school enterprise faculty, and form a new model of school enterprise cooperation; We have implemented a talent cultivation path that integrates expertise and innovation, industry and innovation, ideological and political integration, and competition and innovation integration, leveraging the strategy of building a strong country with talents and practicing the theory of modern talent construction; We divide the five dimensions of competence for college graduates into practical ability, social cooperation ability, learning ability, self planning ability, and achievement motivation, in order to enhance the active learning and practical ability of college students^[3].

According to the above survey, the employment competence of college students and the satisfaction of employers are positively correlated. To promote the dual effect improvement of the two, it is necessary to collaborate with the three main entities of individuals, universities, and employers to construct a three-dimensional matrix improvement model, achieve the goal of two-way improvement of college students' employment competence and employer satisfaction, and ultimately achieve

high-quality employment of college students and drive high-quality socio-economic development^[1].

Contemporary college graduates need to be young people of the era who are both towering and upright, both with dreams in mind and down-to-earth in mind. The first thing to achieve is to have a dream. ^[6]The new wave of artificial intelligence technology represented by ChatGPT has brought new opportunities and also posed new challenges to the employment of college students. As future college students of our motherland, we must dare to dream and cherish the world. But at the same time, we must also be down-to-earth, step by step, brave enough to embrace new technologies and methods, learn to flexibly control various tools and methods, improve employment success rate and satisfaction by enhancing personal employment competitiveness, shape ourselves into usable talents, and contribute our youth and strength to the great rejuvenation of the Chinese nation.

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