IMPACT OF COLLEGE EDUCATION SUPPLY ON COLLEGE STUDENTS' EMPLOYABILITY

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Abstract

As China's higher education enters the stage of popularization, how to improve the quality of talent training has become one of the theories and practical issues worthy of attention at this stage. The development of college students' employment ability is one of the important ways to improve the quality of talent training. However, from the expansion of colleges, the problem of insufficient employment ability of college graduates is increasingly prominent. Based on this background, this article used the improvement of the employment ability structure and employment ability of college students as the research theme of this article. In the theoretical interpretation and expert interview results, the questionnaire was designed, and 402 valid questionnaires were recovered, with SPSS software analyzed the validity and reliability, factor analysis, and use AMOS software analyzed verification factor analysis and structural equation model analysis. Through the quantitative analysis of data, the influencing factor model of college students' employment capacity was verified. The implementation measures for improving the employment ability of college students were proposed.

Introduction

While entering the stage of high education in mainland China, additionally, the number of college graduates has grown annually. Only 1.14

million Chinese students graduated from college in 2001, and in 2011, this number had reached 6.6 million, and then increased at a rate of 2%-5%per year. There were 9.09 million college graduates in China in 2021, and there were 10.76 million graduates in that country in 2022. It is anticipated to expand by 740,000 annually, reaching 11.5 million in 2023.

However, the growth of the labor market cannot provide sufficient jobs to ensure that graduates can go to work smoothly. In addition, employers' expectations for college graduates' employability differ according to their skills. With the continuous improvement of quality, Short-term solutions won't solve the issue of Chinese college graduates having trouble finding work. Therefore, one of the key strategies for resolving the contradiction in the existing job structure is to increase college students' employability. In the context of social transformation and development, China needs more high-skilled and high-level talents (Wei Beibei,2022). As universities that export talents, how to cultivate talents needed by the labor market, how to convert knowledge and skills into productivity, and how to improve student employment through talent training ability has developed into a challenge for colleges and universities urgently need to solve. This article will start from the perspective of students and universities, and take the supply of universities as the guide, and propose countermeasures that will help students improve their employability (Wang Lei,2021).

Research Objectives

1.To study the composition of education supply of colleges and the relationship between education supply and employment capabilities.
2.To research how the ability structure affects the supply and employment ability of colleges and universities.
3.To examine how college should increase college students' capacity for employment.

Literature Reviews

The 21st century is a new world of change. Thailand has advanced into an innovation-driven economy. The goal is to invest in human resources, with educational institutions as a mechanism to produce graduates who meet the expectations of society and the labor market for graduation (Wang Xue. (2020).

Graduates of higher education institutions realize the importance of graduate characteristics and expect to produce graduates with the qualifications and characteristics of being an entrepreneur be a practitioner in business and industry which will have an impact on the economy and development of the country from the study of desirable graduate characteristics in the 21st century and graduate qualifications according to the needs of the workplace found to have communication features Followed by problem solving and teamwork, creativity, information technology, analytical thinking, morality, ethics, leadership, management, decision-making, self-learning. Entrepreneurship Adaptability and, lastly, self-management. These graduates' attributes are roles. Duties and challenges of higher education institutions in setting guidelines for developing student qualifications to become desirable graduates. Able to live a life of self-improvement and professional development in business administration amid intense competition and global changes in the 21st century effectively (Wu Qiong, (2021).

Research Methodology

Research Design: The basis of this study is the actual condition of college students, adopts the method of combining quantitative research and qualitative research, and compiles the college students' employability scale on the basis of the literature review of domestic and foreign college students' employability. Taking this as an entry point, the graduates of Taiyuan Institute of Technology in the past ten years are taken as an illustration of how to do research on college students' employability.

Population and Sample size: The target population of this study is Taiyuan Institute of Technology graduates in recent ten years, more than 30000 people. This study interviewed experts with different working years. If the number of interviews exceeds 20, information will be saturated, so this article interviewed 20 experts from Taiyuan Institute of Technology. The sample size of the survey is as follows:

  Questionnaire sample size: The Taro Yamane formula (1967) for estimating sample size was used to determine the sample size for the questionnaire. Below is a formula for Cochran:

$$n = \frac{N}{1 + Ne^2}$$

n is the adjusted sample size.

Size of the population, N

Based on the research circumstance, e = 0.05 and represents the margin of error (Moe). When calculating a finite sample size when the original sample size is greater than 5% of the population size, the Yamane's formula is used to compute the corrected sample size. The population for this study is 30,000, the error level is 0.05, and the calculation for the necessary sample size is as follows:

$$n = \frac{N}{1 + Ne^2} = \frac{30000}{1 + 30000 * 0.05^2} = 397$$

The sample size for the survey on the population is finite, hence the sample size determined by the Taro Yamane formula (1967) used in this work is 402.
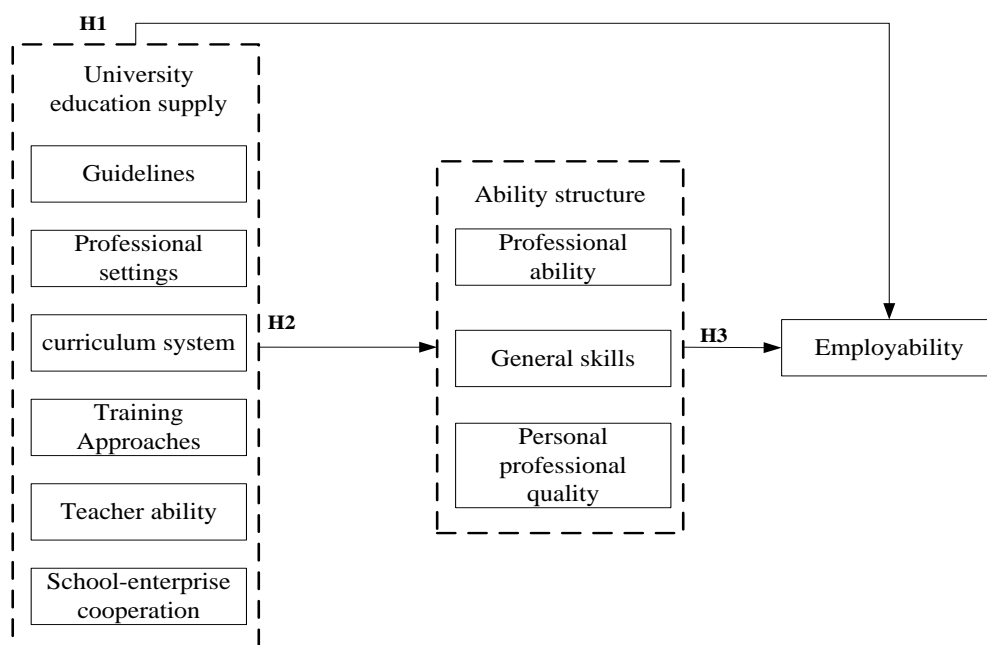
Conceptual Framework

Figure 1 Model of factors influencing employability

Research Hypothesis: Corresponding to this theoretical model, the theoretical assumptions of this paper are as follows:

H1 College education supply is positive to determine employment capabilities.

H2 College education supply is positive to determine the employment ability structure.

H3 Employment ability structure is determining employment capacity.

H4 Employment ability structure plays an intermediary role in the relationship between education supply and employment capacity of colleges.

Interviews and questionnaires. College students' employability is a study area with a solid theoretical and practical base, and its research must have an investigation of practice. In this paper, perspectives will be gained from pertinent professionals in the sphere of higher education on factors that play an important role in enhancing the employability of college students. Based on interviews, with consideration for the structure of college students' employability and the factors that affect employability, this paper will compile a questionnaire according to the principles and requirements of compiling questionnaires, and conduct a survey on college graduates of Taiyuan Institute of Technology. The survey objects include graduates of various majors, graduates with different graduation years and different positions.

Quantitative analysis. Based on qualitative analysis of relevant literature, this study suggests an investigation of the employability's structure and impacting elements. The information gathered via the questionnaire was subjected to a quantitative analysis. In order to determine the structure of college students' employability and pinpoint important variables that influence college students' employability, this study will analyze the data it has collected using the statistical program SPSS.

Data Analysis Procedures: This study will carry out statistical analysis methods for the retrieved questionnaire data, factor analysis, reliability and validity testing, and descriptive statistics. The validity of the research ideas suggested in this work must be confirmed, it is also very important to select appropriate research methods or procedures in addition to accurately designing questionnaires to collect real data. This paper will use the survey data of all valid

questionnaires to establish a database to verify the hypothetical model proposed by the theoretical analysis and the theoretical hypotheses expected by various hypotheses.

This paper firstly uses the software SPSS Statistics 23 to carry out descriptive statistical analysis on the fundamental circumstances of the subjects of the survey, and uses descriptive statistical analysis to quickly assess the fundamental circumstances of various enterprise types, scales, and positions to comprehend the employability and promotion mechanisms of college students. Provide a descriptive statistical analysis basis for further empirical analysis. Descriptive statistics mainly carry out statistical analysis on the sample's demographics, such as the sample's gender, firm size, kind of business, etc., and explain the mean and percentage of each variable to characterize the sample's category and characteristics.

Second, this paper evaluates the reliability and validity of the questionnaire, and then employs the analysis of the structural equation model's verification elements to pinpoint the primary determinants of college students' employment ability structure and employment ability, it establishes the framework for constructing the influence of college students' career potential.

Since the questionnaire was issued, a total of 465 questionnaires have been received. A preliminary inspection of the questionnaires revealed a total of 63 unqualified questionnaires, of which 35 questionnaires were incompletely filled in, and there were almost no differences in the answers to different items in the other 28 questionnaires, so they were eliminated. After excluding unqualified questionnaires, 402 actual valid samples were obtained, and the recovery rate of valid questionnaires was 86.45%.

Results

Descriptive Statistical Analysis: Effective sample data are described using descriptive statistical analysis., including the working years, gender, enterprise scale, enterprise type and position. The questionnaire data is described by SPSS software, and Table1 displays the precise results.

Table1: Sample description

Profile	Category	Frequency	Percentage

Gender	Male	273	68.09%
	Female	129	31.91%
Working years	2 years and below	242	60.20%
	3-5 years	92	22.89%
	5-8 years	45	11.19%
	8-10 years	23	5.72%
Enterprise size	Below 50 people	106	26.37%
	50-100 people	93	23.13%
	100-200 people	81	20.15%
	200-500 people	58	14.43%
	More than 500 people	64	15.92%
Type of enterprise	State-owned enterprise	89	22.14%
	Foreign company	32	7.96%
	Private Enterprise	187	46.52%
	Joint ventures	43	10.70%
	Other	51	12.68%
Type of job	General Staff	188	46.77%
	Grassroots managers	90	22.39%
	Middle managers	89	22.14%
	Company senior management	35	8.70%

Reliability analysis: To determine the reliability of this study table, this article use Cronbach's α reliability coefficient approach. In this study, the composition of the composition of employment capacity structure is 0.934, and the values of each dimension are greater than 0.7, which exceeds the minimum

standard of 0.7. Internal consistency trust, the measurement of the measurement of each dimension project is higher.

Validity analysis: The measurement questions in this study are directly measured. During the same period, it is challenging to locate more reliable data to help. Analyzing the reliability of the conventional correlation is impossible. The content is created with the intention of determining if it is acceptable. This study is based on research on the development of college students' employment capabilities and the theoretical theory of the current employment capacity structure in order to accomplish the content of the content. The experts are constantly revised on the basis of experts, so they are convinced that there should be considerable content.

Factor analysis: In this paper, SPSS was used to conduct exploratory factor analysis on the 10 variables of the questionnaire. The results of KMO and Bartlett's sphericity test in Table 2 show that KMO=0.918 (>0.7), factor analysis greater than 0.70 is a good standard, and the degree of significance (Sig.) =0.000 (very significant), indicating that the data concentration measured by the questionnaire is good and suitable for factor analyze.

Table 2: KMO and Bartlett's test results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.918
Barlett's Test of Sphericity	Approx.Chi-Square	8595.007
	Df	703
	Sig	0.000

Empirical results and hypothetical inspection

Using AMOS software to conduct verification factor analysis research on the employability and employment quality sample data of college graduates in the employability structure table of colleges and universities. Create a preliminary model using the factor structure from exploratory factor analysis. Figure 2 is a roadmap for the verification factor analysis of the structural model of college students' employability.
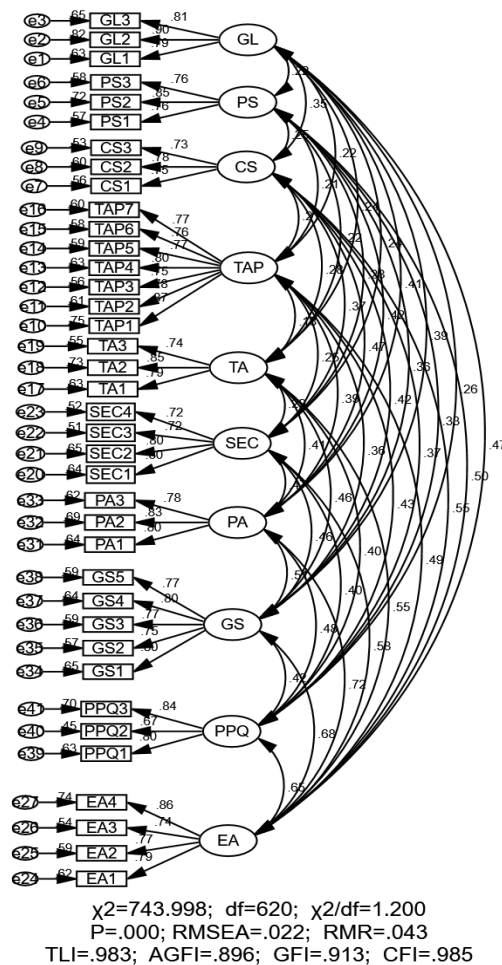
χ2=743.998; df=620; χ2/df=1.200
P=.000; RMSEA=.022; RMR=.043
TLI=.983; AGFI=.896; GFI=.913; CFI=.985

Figure 2 Confirmatory factor analysis of the model

Most observation variables on the corresponding factor loads are above 0.7, indicating that the observation variables explain the corresponding factors to the corresponding factor, and the basic skills and professional skills are slightly lower. The model fitting results show that the free parameters of the model are less than the total difference between the observation data and the difference between the collaborative party. The college student's employment capacity structure model can be identified; the card fitting index shows that P = 0.00 is very significant, so the model fit well.

Through the constituent of the 10 college students' employment ability structure, 38 measures of the characteristics that affect college students' ability to get jobs, using factor analysis to reduce the indicators of these 10 employment capabilities and 38 influencing factors, respectively. There are 3 main component factor and 6 main component factor. On this basis, the employment capacity is used as an adaptation, and the six influence factors are used as an independent variable to perform verification factors analysis to identify the key impact factor affecting the employment ability of developing a model to influence college students' ability to get jobs, and it further verified the assumptions proposed by this article at the beginning. Structural equation model is shown in Figure 3.
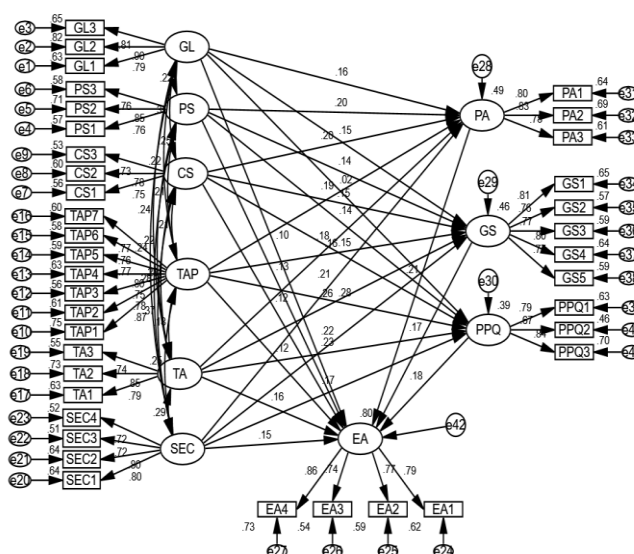

Figure 3 Employment ability structural equation model

On the basis of the structural model's analysis, the author tested whether the hypothesis of the relationship the path between the latent variables was established. Coefficient and significance level according to the theoretical assumptions put forward in the model of factors affecting the employability of college students. Table 4 displays the test results.

Table 4 Significance test results

Variable			Estimate	S.E.	C.R.	P	Significance Test
PA	<---	GL	0.143	.046	3.104	.002	significance
PA	<---	PS	0.167	.044	3.742	***	significance
PA	<---	CS	0.219	.063	3.462	***	significance
PA	<---	TAP	0.137	.035	3.859	***	significance
PA	<---	TA	0.153	.043	3.565	***	significance
PA	<---	SEC	0.164	.044	3.707	***	significance
GS	<---	GL	0.136	.046	2.943	.003	significance
GS	<---	PS	0.124	.044	2.805	.005	significance
GS	<---	CS	0.166	.063	2.648	.008	significance
GS	<---	TAP	0.122	.035	3.458	***	significance
GS	<---	TA	0.221	.044	5.012	***	significance
GS	<---	SEC	0.176	.045	3.948	***	significance
PPQ	<---	GL	0.022	.054	.413	.679	unsignificance
PPQ	<---	PS	0.127	.052	2.435	.015	significance
PPQ	<---	CS	0.181	.074	2.464	.014	significance
PPQ	<---	TAP	0.229	.043	5.324	***	significance
PPQ	<---	TA	0.209	.051	4.088	***	significance
PPQ	<---	SEC	0.145	.052	2.804	.005	significance
EA	<---	GL	0.099	.038	2.564	.010	significance
EA	<---	PS	0.126	.038	3.275	.001	significance
EA	<---	CS	0.141	.053	2.635	.008	significance
EA	<---	TAP	0.101	.032	3.122	.002	significance
EA	<---	TA	0.151	.040	3.794	***	significance
EA	<---	SEC	0.132	.039	3.425	***	significance

	Variable		Estimate	S.E.	C.R.	P	Significance Test
EA	<---	PA	0.234	.059	3.958	***	significance
EA	<---	GS	0.190	.053	3.581	***	significance
EA	<---	PPQ	0.183	.048	3.793	***	significance

The Guidelines has no demonstrably beneficial effect on personal professional quality, the primary factor is that personal professional quality is determined by the growth environment and the individual, and the impact of the school's clear employability training policy on it is indirect, so the result is not significant. All other path tests have passed, and the hypothesis mentioned in the paper are all established.

Discussions

Promote the innovation of training objectives to guide the improvement of college students' employability

It is important to note that the objective of cultivating college students' employability should be coordinated and hierarchical. Its coordination is firstly manifested in the coordination and consistency between vertical and horizontal within the organization, and the goal needs to be recognized by all departments, especially teachers (Pang Fangqi，2020); Secondly, the adaptability of training objectives to the external environment. The hierarchical nature of the goal is that the goal needs to combine different majors and develop the employability related to the specialty according to the possibility of future career development related to the specialty, especially the professional ability that is different from the employability of other majors (Liu Yang, 2018).

Promote management innovation to improve college students' employability

Establish employability promotion oriented training channels: First, vocational qualification education can be introduced into higher education; Secondly, establish an effective way of entrepreneurship education; Third, actively develop the practice base, improve the management and guidance of

practice teaching, and urge pupils to take part in social practice activities in a proactive manner; Fourth, strengthen exchanges with other universities at home and abroad, especially international exchanges; Fifth, actively encourage students to participate in community activities (Deng Yanfang,2020).Build school-enterprise cooperation: First, universities should set up special institutions or assign special personnel from existing institutions to be responsible for the negotiation and negotiation with the industry; Second, universities should establish a detailed mechanism for cooperation with industry, establish a detailed description of the contribution and demand of industry-university cooperation, and construct a detailed agreement framework for cooperation between universities and industry. Establish an adjustment mechanism for specialty setting. Embed employability improvement into the curriculum system (Wu Qiong, 2021).

Promote personnel innovation to improve the employability of college students

Personnel innovation describes the alteration of administrative staff members' knowledge, abilities, and attitudes (Wang Xue.,2020). Personnel innovation specifically refers to how colleges and universities alter the fundamental idea of teacher talent development, so that professional teachers have certain professional experience, broaden the knowledge of teachers, and so on. It is one of the crucial connections that must be made in order to improve instructors' professional experience, scientific research, and degree of professional knowledge and abilities, and encourage teachers to go to enterprises and government departments for temporary training (Li Zilian, 2020).

Conclusions

The development of college students' employment ability is one of the important ways to improve the quality of talent training. However, from the expansion of colleges, the problem of insufficient employment ability of college graduates is increasingly prominent. Based on this background, this article used the improvement of the employment ability structure and employment ability of college students as the research theme of this article. Whether there are differences in the extension and composition of the employability of undergraduates in different majors and differences more in-depth debate is also required about the methods and tactics for increasing the employability of

college students majoring in various fields. The issue of how to assess college students' employability merits more research.

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