

# Research on the Evaluation System of College Students' Employability Against the Background of Structural Employment Contradiction

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**Abstract**—With the popularization of higher education, the employment problem of university graduates cannot be ignored. Due to the lack of a clear understanding of self-ability, college graduates do not have an advantage in the highly competitive talent market, so it is urgent to guide college students to correctly define and evaluate their self-employment ability. From many aspects and angles, this paper analyzes the formation of college students' employability, and establishes an evaluation system of college students' employability based on four first-class indicators including college students' own factors, school factors, government factors and employer factors, and 13 second-class indicators.

**Keywords**—structural employment contradiction; college students' employment; ability evaluation

## I. INTRODUCTION

In the era of continuous popularization of higher education, more and more senior talents are pouring into the talent market, but with the increasing supply of talents, there is still a huge talent gap in the employment market. There has been a long time of incongruity between the types of job seekers and the types of jobs that need to be worked, which leads to serious structural employment contradictions. According to the 13th Five-Year Plan for the development of national education, we should adhere to the strategy of giving priority to employment, implement a more active employment policy, create more jobs, and strive to solve the structural employment contradiction. Therefore, it is a hot topic to study the employment ability of college students under the background of structural employment contradiction in China's education field, especially in colleges and universities.

From the perspective of college students themselves, employment is the choice of most college students after graduation. However, due to the fierce competition in the employment market, and college students are usually unable to do their jobs because they do not have sufficient knowledge and technology reserves or lack of self-awareness, college students can not improve themselves accurately and efficiently, so the employment situation of college students is increasingly not optimistic. From the perspective of employers, new technologies, new business forms and new industries are emerging in today's society, and the demand and standards for

talents in the employment market are also rapidly adjusted. Employers must constantly introduce new talents. However, the employment market is a mixture of advantages and disadvantages. Employers are in the disadvantage of information when they hire college students. The risk of information asymmetry in the employment relationship often prevents enterprises from absorbing college students. From the perspective of cultivating senior talents in colleges and universities, colleges and universities shoulder the responsibility of cultivating and transporting senior talents for the economic society. In the new economic era, the market demand is changing rapidly, so is the talent market. Colleges and universities need to know the needs of social talents and students' abilities in time so as to teach students in accordance with their aptitude and cultivate the talents needed by the society. Therefore, it is very important to study the evaluation system of college Students' employability.

In the current research on improving the employability of college students, there have been some explorations on the evaluation system of college students' employability, but in the new economic era, the evaluation system has a strong timeliness, and the past scale is no longer fully applicable. Therefore, the development of an evaluation index system of college students' employability in line with the needs of social development and the current situation of education will help college students have a clearer and accurate understanding and definition of their own employability, improve the employability of college students from the objective level, and make college graduates and vacant posts more efficient matching.

## II. RESEARCH TRENDS AND THEORETICAL BASIS

### A. On the Concept of College Students' Employability

For the study of college students' employability, different researchers will have different research perspectives, and then come to different connotations or definitions, but no matter what the definition is, it refers to the ability of students to get jobs (Harvey, 2001). The employment ability of college students refers to a series of abilities that graduates can obtain employment opportunities and succeed in their jobs. All of the studies involved occupation type, employment time,

recruitment characteristics, further learning and employment skills (Harvey, 2001). Andrew Rothwell (2008) and others take college students as research objects, and propose that for college students, employability refers to the ability of individuals to obtain continuous employment opportunities commensurate with their qualification level.

### *B. On the Composition of College Students' Employability*

The research on the composition of college students' employability is based on the research on the composition of employability. The determination of the composition of employability is closely related to the definition of employability. Different definitions of employability will have different composition of employability (Harvey, 2001). Most scholars have similar conclusions on the definition of college students' employability. They divide employability into various basic abilities, such as professional ability, learning ability, problem-solving executive ability, practical ability, application skills and adaptability to professional environment (Xiaoming Zheng, 2002). Chang Lu (2007) defined the composition of college students' employability as professional ability, self-study ability, practical ability and competitive ability. Xiangquan Zeng (2004) collected the data of employers' requirements for the ability of university graduates through a questionnaire survey of employers, and reached the following conclusions: employers pay most attention to the professional knowledge and skills of college graduates, followed by their professionalism, willingness to continue learning, communication and coordination ability, and problem-solving ability.

### *C. On the Formation of College Students' Employability*

The UK is the most typical example of foreign research and development of employability. Knight and Yorke (2002) proposed that colleges and universities should set the development of employability as the goal of talent cultivation, embed employability into the teaching process of university courses, and pay attention to the cultivation of not only professional ability, but also general ability. Lee Harvey (2001) regards the training of employability as the process of the ability improvement of college graduates from school to work, and points out that employers play an important role in the training of college students' employability, which is mainly manifested in that employers can provide internships for college students, and employers can influence the development of college students' employability by participating in the design of curriculum system.

The research of Chinese scholars is similar to that of foreign scholars, which is analyzed from a qualitative perspective. Ruoxia Zhu and Xiaojie Ma (2004) pointed out that colleges and universities should strengthen the contact with employers, so as to provide more practice and practice opportunities for college students. Some scholars have put forward some views on the adjustment of the training objectives and the setting of specialties in colleges and universities. Lingxiao He (2007) believes that colleges and universities should determine the training objectives of colleges and universities based on the market demand for talents. In line

with the market demand under the guidance of teaching reform, the development of college students' employability.

## III. GENERATION OF INITIAL INDICATORS

In order to obtain more practical and scientific initial indicators, based on a large number of literature review, this paper also invited 5 professional teachers with senior titles, 10 quasi graduates and 3 employees with working experience in the human resources department of the enterprise to conduct group interviews, and finally determined 60 questions. Through in-depth interviews with teachers with senior professional titles, we summarized 60 questions and finally formed 32 initial indicators. Some examples of initial indicator generation are as follows:

Example 1: The original question is whether their personality is lively and cheerful has an impact on the employability of college students. The abstract of this question is that college students are lively and cheerful, and the generated indicator is "Lively and cheerful personality".

Example 2: The original question is whether having a solid professional foundation has an impact on the employment ability of college students and whether or not to obtain professional related qualification certificate has an impact on college students' employability. The abstract of this question is that college students' knowledge and skills reserve related to employment, and the generated indicator is "knowledge and skills reserve".

Example 3: The original question are whether the university is a comprehensive university has an impact on the employability of college students and whether the university is located in the first-line economic developed city has an impact on the employment ability of college students. The abstract of this question is that general situation and strength of the university, and the generated indicator is "strength of the school".

Example 4: The original question is whether the goal of university is to cultivate applied talents has an impact on the employment ability of college students. The abstract of this question is that university personnel training mode, and the generated indicator is "scientific training mode".

Example 5: The original question is whether the graduates actively guide the students' practice training has an impact on the employment ability of college students. The abstract of this question is that whether the school attaches importance to the employment guidance for students, and the generated indicator is "full employment guidance".

Example 6: The original question is whether the local government has the employment and entrepreneurship policies to help college students have an impact on their employability. The abstract of this question is the government's employment support policy for college students, and the generated indicator is "government support".

#### IV. QUESTIONNAIRE SURVEY AND CONSTRUCTION OF INDICATOR SYSTEM

Using Likert 5-point Scale, the 32 indicators generated were made into a paper-based questionnaire. The respondents discussed the impact of each indicator on the employment ability of college students. There were five answers: "agree a lot", "agree", "neutral", "disagree", "disagree a lot", which were divided into 5-1 points, to measure the effectiveness of each indicator for the evaluation of college students' employability by offline survey. The subjects of the survey are college students who will graduate in June 2020. A total of 55 questionnaires were sent out, 50 of which were recovered, with an effective recovery rate of 90.91%. In the recovered data, based on the experience of Liu and Zhou, the indicators with an average score of no more than 2 points are deleted directly, and 25 indicators were reserved.

In order to further simplify the indicators, the Likert 5-point Scale was used again, and 25 indicators were made into the online version of the questionnaire, which was released through the network platform (<https://www.wjx.cn/>). The questionnaire is mainly distributed to college students, university faculty, employee of government personnel and social sectors, employee of personnel departments of employers and other groups that have direct or indirect relationship with college students' employment. We sent out 150 questionnaires, 143 questionnaires were recovered, the effective recovery rate was 95.33%.

##### A. Descriptive Statistical Analysis

In 143 cases, there are 50 college students investigated, accounting for 34.97%, which is representative (Fig. 1). From the perspective of geographical distribution, this survey has a wide geographical distribution, which has a certain universal significance.

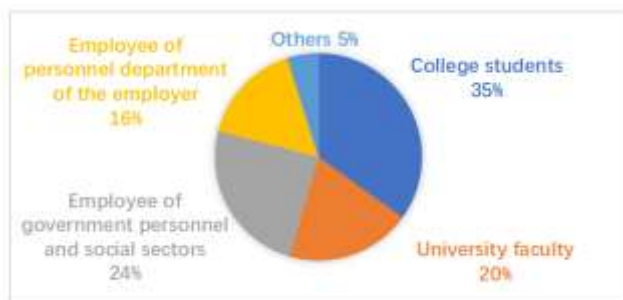


Fig. 1. Occupational Distribution Of Respondents

##### B. Simplification and Refinement of Evaluation Indicators

In order to avoid the burnout caused by too long questionnaires or scales, the number of indicators should be reduced in order to obtain more accurate and practical results. KMO and Bartlett's test (Table I) show that KMO value is greater than 0.8, while Bartlett's test is significant at the level of 0.01, indicating that sampling is sufficient and data is suitable for factor analysis. The specific operations are as follows: (1) the orthogonal rotation method with the largest variance is used for factor analysis, with factor load of 0.8 as

the intercept point, and the indexes lower than the standard are deleted. (2) In the reliability test, if Cronbach's  $\alpha$  coefficient is significantly improved after deleting an index, the index will be deleted. Finally, 13 indicators were reserved.

TABLE I. RESULTS OF KMO AND BARTLETT'S TEST

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>		0.851
<b>Bartlett's Test of Sphericity</b>	Approx. Chi-Square	1672.281
	df	105
	Sig.	0.000

##### C. Factor Analysis and Reliability Test

The orthogonal rotation method with the largest variance is used for factor analysis, and the results are shown in Table II. The cumulative interpretation rate of variance after rotation is 66.087%, which can explain the whole level to a large extent. The detection of Cronbach's  $\alpha$  coefficient shows that the overall  $\alpha$  coefficient of 13 indexes is 0.857, the maximum  $\alpha$  coefficient of each factor is 0.863, and the minimum  $\alpha$  coefficient is 0.805, indicating that the internal consistency of the index system is good.

TABLE II. RESULTS OF FACTOR ANALYSIS AND CRONBACH'S A COEFFICIENT TEST

Factor	Indicator	Cronbach's $\alpha$ coefficient	Variance interpretation rate
Factor 1	Lively and cheerful personality	0.864	34.891%
	Self-career planning		
	Social practice ability		
	Knowledge and skills reserve		
Factor 2	Strength of the school	0.805	15.496%
	Full employment guidance		
	Rationalization of curriculum		
	Scientific training mode		
Factor 3	Local employment support	0.863	8.251%
	Government support		
	Special talent planning		
Factor 4	Opening practice base	0.830	7.450%
	Talent demand of enterprises		

##### D. Weight of Evaluation Indicators

After reviewing a large number of relevant literature, fully listening to the opinions of 5 professional teachers with senior titles, and combining the results of the indicators generated, the four factors are named as self factor, school factor, government

factor and employer factor, which are the four first level indicators of the evaluation system. In order to see more clearly the difference of the importance of each indicator to the employment ability of college students, further investigation is needed.

Thirdly, using Likert 5-point Scale, the final 13 indicators were made into electronic questionnaire, which was released by the network platform. In the empowerment survey, the respondents not only measure the employability of college students individually for each indicator, but also compare the 13 indicators and assign the total score of 100 points to each indicator.

A total of 80 questionnaires were sent out and 72 were recovered, with an effective recovery rate of 90%. Calculate the average score of each indicator and keep the integer. The average score of each indicator is the final weight of the index in the evaluation system of college students' employability, and finally form a complete evaluation system of college students' employability.

TABLE III. WEIGHT OF COLLEGE STUDENTS' EMPLOYABILITY EVALUATION SYSTEM

First level indicator	Second level indicator	Weight of second level indicator	Weight of first level indicator
Self factor	Lively and cheerful personality	10	39
	Self-career planning	9	
	Social practice ability	9	
	Knowledge and skills reserve	11	
School factor	Strength of the school	8	31
	Full employment guidance	9	
	Rationalization of curriculum	8	
	Scientific training mode	6	
Government factor	Local employment support	5	14
	Government support	5	
	Special talent planning	4	
Employer factor	Opening practice base	8	16
	Talent demand of enterprises	8	

## V. CONCLUSIONS AND SUGGESTIONS

### A. Research Conclusion

In the era of continuous popularization of higher education, the problem of difficult employment of college students is becoming more and more obvious, so it will inevitably lead to the attention of the evaluation of college students' employability. This paper considers from many angles and investigates from many aspects. It makes a questionnaire survey and some group interviews on college students, university faculty, employee of government personnel and social sectors, employee of personnel departments of employers. Finally, an evaluation index system of college students' employability, which is suitable for the needs of social development and the current situation of education, is constructed, including four first-class indicators and 13 second-class indicators.

From the weight of each indicator, the proportion of its self factor is the largest, up to 39%. School factor is the second, accounting for 31%; government factor accounts for the smallest, accounting for 14% of the whole evaluation scale, and employer factor accounts for 16%. It can be seen that college students' individual characteristics, career planning, extracurricular practice and employment behavior have the greatest impact on their employability, and they are the most representative. However, various government factors have not accounted for a large proportion of the impact on college students' employability, and have little impact on the evaluation of college students' practical ability.

### B. Management Suggestions

As a senior social talent, university graduates are the relay and innovator of social and economic development. They should be put into social and economic production efficiently. Therefore, it is necessary to guide college students to recognize and define their employability more clearly and accurately, improve their employability, and make college graduates match with vacant posts more efficiently.

#### 1) Enhance self-awareness

There are a lot of structural employment contradictions in the talent market, the main reason is that the unemployed are not clear about their self-awareness and cannot give full play to their talents in the field they are good at. As a senior talent in various fields, college students should have a clear understanding and definition of their own abilities, and should not be ambitious, so as to make the best use of everything and reduce the idle work in the fields that they are not good at or are not suitable for.

#### 2) Improve employment ability from self

According to the weight of each index in the evaluation system of College Students' employability explored in this paper, self factors are the most important for college students' employability. Therefore, if college students want to fundamentally improve their employability, they need to constantly enrich their professional knowledge, cultivate the spirit of team cooperation, exchange and sharing, be willing to accept new knowledge, dare to practice, and constantly hone and accumulate their own experience in practice.

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