# The Factors Influencing Human Resource Employment of Students in the Context of Popularity and Guaranteed Employment

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## Abstract

In the context of an evolving employment security framework and the widespread access to higher education, the employment challenges faced by college students' human resources have garnered increasing societal attention. This paper aims to investigate the factors that influence the employment of student human resources within an employment security environment and to analyze how these factors impact students' job opportunities and career progression. By integrating quantitative and qualitative research methodologies, this study constructs a conceptual framework that encompasses competency, HRD practise (HRD), market demand, internship experiences, and job performance, and applies structural equation modeling to analyze the collected data. The findings reveal that competency, internship experiences, and HRD practise (HRD) significantly affect students' employment performance, while market demand plays a moderating role between these factors and employment outcomes. This research offers insights for universities, businesses, and students on how to enhance the competitiveness of student employment.

**Keywords:** Student Human Resources Employment; Employment Security; Competencies; Human Resource Development Practices; Market Demand; Internship Experiences; Job Performance

## Introduction

Under the umbrella of employment assurance, the historical trajectory of factors influencing the employment of student human resources dates back to the previous century. Historically, the

employment prospects of student human resources have been shaped by a multitude of factors, encompassing economic conditions, policy and regulation frameworks, and the educational system, among others (Coll et al., 2009). The research inquiry is centered on identifying the factors that impact the employment of student human resources within the context of guaranteed employment. It seeks to understand how these factors interplay and collectively affect the employment opportunities and career progression of students.

The necessity of this research lies in its capacity to address the multifaceted challenges and issues that students face in the job market, such as a scarcity of employment opportunities, discrimination, low-quality jobs, misalignment between educational content and market demands, and a deficiency in career planning and guidance (Winborg et al., 2023). Resolving these issues requires a concerted effort from multiple stakeholders including governments, college and university, and enterprises. By conducting this research, we can better understand the complex interplay of factors influencing student employment and develop targeted strategies to enhance their job prospects. This study is crucial for shaping policies and educational reforms that are responsive to the dynamic nature of the job market and the evolving needs of student human resources. It also plays a pivotal role in providing insights into the effectiveness of existing measures and identifying areas for improvement, ultimately aiming to foster a more robust and inclusive employment landscape for students.

## Research objectives

1. Explore the factors the factors influencing human resource employment of students in the context of popularity and guaranteed employment.

2. Explore how Competency, HRD Practices, Job Market Demand, Internship experience, Job Performance effect affect the human resource employment of students in the context of popularity and guaranteed employment.

## Research Methodology

Literature review is a systematic method of collecting, evaluating, and interpreting existing research literature to establish a knowledge system and theoretical foundation within a certain field. Through literature review, researchers can identify research gaps, theoretical controversies, and future

research directions within the research field. In this study, it was used to construct a theoretical framework and research hypotheses. By systematically reviewing and analyzing relevant literature in fields such as economics, education, and psychology, key factors affecting students' employment in human resources can be identified. Through literature review, the relationship between abilities, internship experience, human resource development practices, market demand and student employment was identified, and research hypotheses were developed based on this.

Survey research method is a research method that collects a large amount of data through questionnaires, interviews, and other methods to analyze specific phenomena or behaviors. This method can provide descriptive or inferential information and is suitable for exploring and verifying research hypotheses. This study used a survey research method to collect data. The researchers designed a detailed questionnaire, including quantitative scoring questions, to assess the views and experiences of students, educators, and businesses on various aspects of human resource employment. The questionnaire covers multiple dimensions such as abilities, internship experience, human resource development practices, market demand, and job performance. Data was collected from employees and managers of 10 companies in China through random sampling. After the data collection was completed, structural equation modeling (SEM) was used for data analysis. SEM is a multivariate statistical analysis technique suitable for testing complex causal relationships and mediating effects. Firstly, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were conducted to ensure the reliability and validity of the questionnaire. Then, the relationship between various variables was analyzed through SEM, including the impact of abilities, internship experience, human resource development practices on job performance, and the moderating effect of market demand.

## Conceptual Framework

As Figure 1.
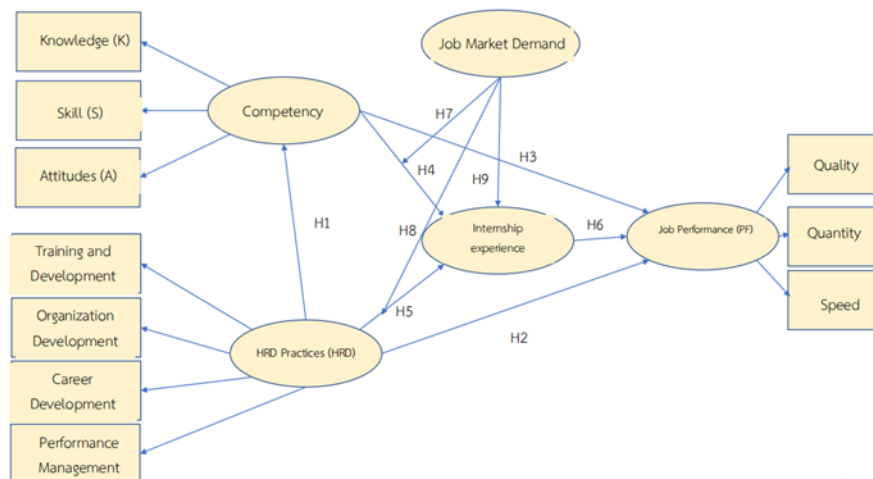


**Figure 1** Conceptual Framework (Source: Constructed by the researcher)

## Research Results

### 1. Analysis of mean value

**Table 1** Analysis of mean value

| Name | Average | Standard deviation | Median |
|---|---|---|---|
| Knowledge | 3.343 | 0.985 | 3.400 |
| Skills | 3.378 | 0.976 | 3.400 |
| Attitude | 3.318 | 1.005 | 3.250 |
| Training and Development | 3.427 | 0.946 | 3.500 |
| Organizational Development | 3.457 | 0.911 | 3.600 |
| Career Development | 3.381 | 1.008 | 3.400 |
| Performance Management | 3.505 | 0.954 | 3.600 |
| Job market demand | 3.502 | 0.945 | 3.750 |
| Internship Experience | 3.350 | 0.960 | 3.400 |
| Quality | 3.356 | 0.972 | 3.400 |
| Quantity | 3.403 | 0.951 | 3.600 |
| Speed | 3.428 | 0.966 | 3.600 |

Performance management topped the list with an average of 3.505, showing how much emphasis companies place on employee performance. This shows that college students need to have good performance management ability in the job search process in order to achieve excellent performance in the work.

It was followed by job market demand, with an average of 3.502. This shows that college students must pay close attention to changes in market demand when choosing their major and career direction, so as to better adapt to the employment environment. Having skills and knowledge with high market demand will help improve the competitiveness of college students in employment.

Organizational development ranked third with an average of 3.457, indicating that college students need to understand the development direction and organizational structure of enterprises during the job hunting process. Having a good sense of organizational development helps college students better integrate into the enterprise and give full play to their advantages.

In addition, college students should also pay attention to career development, with an average of 3.381. Career development planning is crucial for personal career growth, and college students need to clarify their career goals and make practical action plans in order to advance steadily in the workplace. At the same time, college students should also actively expand their contacts and participate in various career development lectures and activities to lay a solid foundation for their future career.

The average values of knowledge and skill are 3.343 and 3.378 respectively, which reminds college students to pay attention to the study of professional knowledge and the cultivation of practical skills during their time in school. By participating in various courses, experiments, internships and projects, college students can combine theoretical knowledge with practical operation to improve their overall quality. At the same time, college students should also focus on interdisciplinary learning to broaden their knowledge so as to meet the diversified needs of the future workplace.

The average value of attitude was 3.318, indicating that a proactive attitude is equally important in the job hunting process. Whether in study or work, maintaining an optimistic, diligent and cooperative attitude can help college students better cope with various challenges. In addition, college students should also learn self-reflection and self-management, and cultivate good time management and emotional management skills to improve individual work efficiency and teamwork ability.

The average value of internship experience is 3.350, indicating that internship experience is of great significance to college students' career development. Through internship, college students can

learn about the workplace environment in advance, accumulate work experience and improve vocational skills. Therefore, college students should actively seek internship opportunities and choose internship positions related to their major and career goals in order to gain more learning and growth during the internship process.

Finally, the average values of quality, quantity and speed are 3.356, 3.403 and 3.428 respectively, which reflects that high efficiency and high quality completion of tasks are equally important at work. In their study and work, college students should pay attention to cultivating their time management ability, arrange their time reasonably, and ensure that they can complete high-quality work within the prescribed time. At the same time, college students should also learn to play their own advantages in team cooperation and improve the overall efficiency of the team.

To sum up, college students need to comprehensively improve their knowledge, skills, attitude, internship experience and understanding of performance management, job market demand, organizational development and career development in the process of job hunting. Only in this way can they stand out in the fierce job competition and achieve their career goals.

### 2. Validity analysis

After the reliability is OK, the next thing to analyze is the validity of the questionnaire. Validity analysis is to study whether the questionnaire question design is reasonable, that is, the degree to which the test can measure the true level of the measured object. Better validity means that the internal consistency of the questionnaire data is better.

**Table 2** KMO and Bartlett tests were used to verify the validity

| KMO values | | 0.952 |
|---|---|---|
| | Approximate Chi-square | 19669.148 |
| Bartlett sphericity test | df | 1596 |
| | p value | 0.000 |

As can be seen from the table above: the KMO value is 0.952, and the KMO value is greater than 0.8, the research data is very suitable for extracting information (the validity is good reflected from the side).

## 3. Exploratory factor analysis

A KMO value greater than 0.6 meets the prerequisite requirements of factor analysis, which means that the data can be used for factor analysis research. And the data passed the Bartlett sphericity test (p<0.05), indicating that the research data was suitable for factor analysis.

Exploratory factor analysis is used to explore the analysis items (quantitative data) should be divided into several factors (variables), for example, 20 scale items should be divided into several aspects more appropriate. Factor analysis is an analysis method to condense information. For example, there are 14 items in this example. The 14 items can be condensed into several keyword descriptions. For example, if a person has 14 sentences, they can actually be described in four words. Of course, 14 sentences end up in four words, so there must be some information missing (variance explanation rate means that 4 words can extract 14 items of information). And 14 sentences that correspond to 4 words. The key is actually finding the correspondence.

The data in this study were rotated using the maximum variance rotation method (varimax) in order to find the correspondence between factors and study items.

A total of 12 factors were extracted from factor analysis, and the eigenroot values were all greater than 1. This 12 factor variance explained after the rotation rate were 6.215%, 6.143%, 6.142%, 6.087%, 6.061%, 6.045%, 6.026%, 6.022%, 5.789%, 4.941%, 4.871%, 4.661%, And the cumulative variance explanation rate after rotation was 69.002%. And the variance interpretation rate (information extraction amount) of the 12 factors are: 6.215%, 6.143%, 6.142%, 6.087%, 6.061%, 6.045%, 6.026%, 6.022%, 5.789%, 4.941%, 4.871%, 4.661%, the amount of information extraction distribution is relatively uniform, synthetically the factor analysis results were good.

## 4. Confirmatory factor analysis

### 4.1 First-order confirmatory factor analysis

First-order confirmatory factor analysis involves 12 sub-levels. Knowledge, skill, attitude, training and development, organizational development, career development, performance management, job market demand, internship experience, quality, quantity, speed, 12 sub-levels cover a total of 57 measurement items.

The model fitting index is used to analyze the overall model fitting validity; There are so many model fitting indexes that it is usually difficult for all indexes to reach the standard. It is

recommended to use several common indicators, including Chi-square freedom ratio, GFI, AGFI, NFI, TLI, IFI, CFI.

**Table 3** First-order confirmatory factor analysis

| \Adaptive index | CMIN/DF | RMSEA | GFI | AGFI | NFI | IFI | TLI | CFI |
|---|---|---|---|---|---|---|---|---|
| Adaptation criteria | < 3-5 | < 0.08 | > 0.85 | > 0.9 | > 0.9 | > 0.9 | > 0.9 | > 0.9 |
| Test results | 1.088 | 0.012 | 0.917 | 0.907 | 0.921 | 0.993 | 0.993 | 0.993 |
| Fit Judgment | Matching | Matching | Matching | Matching | Matching | Matching | Matching | Matching |

According to the test results of CFA factor analysis model, the CMIN/DF value is 1.088, which is less than the adaptation standard of 3 to 5; the RMSEA value is 0.012, which is less than the critical value of 0.08; and the equivalent of statistical tests GFI, AGFI, NFI, TLI, IFI and CFI are all above the adaptation standard of 0.9. This indicates that the model has a good fit.

4.2 Second-order confirmatory factor analysis

Competency

The second-order confirmatory factor analysis of competency involves 3 sub-levels, namely knowledge, skill and attitude, covering 14 measurement items in total.

The model fitting index is used to analyze the overall model fitting validity; There are so many model fitting indexes that it is usually difficult for all indexes to reach the standard. It is recommended to use several common indicators, including Chi-square freedom ratio, RMSEA, GFI, AGFI, NFI, IFI, TLI, CFI.

**Table 4** Second-order factor analysis of competency

| \Adaptive index | CMIN/DF | RMSEA | GFI | AGFI | NFI | IFI | TLI | CFI |
|---|---|---|---|---|---|---|---|---|
| Adaptation criteria | < 3-5 | < 0.08 | > 0.85 | > 0.9 | > 0.9 | > 0.9 | > 0.9 | > 0.9 |
| Test results | 1.184 | 0.017 | 0.979 | 0.970 | 0.981 | 0.997 | 0.996 | 0.997 |
| Fit Judgment | Matching | Matching | Matching | Matching | Matching | Matching | Matching | Matching |

According to the test results of CFA factor analysis model, CMIN/DF value is 1.184, which is less than the adaptation standard of 3 to 5, RMSEA value is 0.017, which is less than the critical value of 0.08, and the equivalent of statistical tests GFI, AGFI, NFI, TLI, IFI and CFI are all above the adaptation standard of 0.9. This indicates that the model has a good fit.

HRD practices

The second-order confirmatory factor analysis of human resource development practice involves 4 sub-levels, namely training and development, organizational development, career development and performance management, covering 19 measurement items in total.

The model fitting index is used to analyze the overall model fitting validity; There are so many model fitting indexes that it is usually difficult for all indexes to reach the standard. It is recommended to use several common indicators, including Chi-square freedom ratio, RMSEA, GFI, AGFI, NFI, IFI, TLI, CFI.

**Table 5** Second-order factor analysis of HRD practices

| \Adaptive index | CMIN/DF | RMSEA | GFI | AGFI | NFI | IFI | TLI | CFI |
|---|---|---|---|---|---|---|---|---|
| Adaptation criteria | < 3–5 | < 0.08 | > 0.85 | > 0.9 | > 0.9 | > 0.9 | > 0.9 | > 0.9 |
| Test result | 1.295 | 0.022 | 0.968 | 0.958 | 0.969 | 0.993 | 0.992 | 0.993 |
| Fit Judgment | Matching | Matching | Matching | Matching | Matching | Matching | Normal | Matching |

From the test results of CFA factor analysis model, we can see that CMIN/DF value is 1.295, less than the adaptation standard of 3 to 5, RMSEA value is 0.022, less than the critical value of 0.08, and the equivalent of statistical tests GFI, AGFI, NFI, TLI, IFI and CFI are all above the adaptation standard of 0.9. This indicates that the model has a good fit.

Work performance

The second-order confirmatory factor analysis of job performance involves four sub-levels, namely, training and development, organizational development, career development, and performance management, covering a total of 19 measurement items.

The model fitting index is used to analyze the overall model fitting validity; There are so many model fitting indexes that it is usually difficult for all indexes to reach the standard. It is

recommended to use several common indicators, including Chi–square freedom ratio, RMSEA, GFI, AGFI, NFI, IFI, TLI, CFI.

**Table 6** Second–order factor analysis of Job performance

| \Adaptive index | CMIN/DF | RMSEA | GFI | AGFI | NFI | IFI | TLI | CFI |
|---|---|---|---|---|---|---|---|---|
| Adaptation criteria | < 3-5 | < 0.08 | > 0.85 | > 0.9 | > 0.9 | > 0.9 | > 0.9 | > 0.9 |
| Test results | 1.120 | 0.014 | 0.979 | 0.971 | 0.980 | 0.998 | 0.997 | 0.998 |
| Fit Judgment | Matching | Matching | Normal | Matching | Matching | Matching | Matching | Matching |

According to the test results of CFA factor analysis model, CMIN/DF value is 1.120, which is less than the adaptation standard of 3 to 5, RMSEA value is 0.014, which is less than the critical value of 0.08, and the equivalent of statistical tests GFI, AGFI, NFI, TLI, IFI and CFI are all above the adaptation standard of 0.9. This indicates that the model has a good fit.

**Table 7** structural equation model path coefficients

| Structural Equation path | | Non–standard path coefficients | S.E. | C.R. | P | Standard path coefficient |
|---|---|---|---|---|---|---|
| Competency <--- | Human resource development practice | 857. | 082. | 10.458 | * * * | 762. |
| Internship experience <--- | Competency | 483. | 110. | 4.388 | * * * | 389. |
| Internship Experience <--- | Human resource development practice | 283. | 133. | 2.129 | 033. | 203. |
| Internship experience <--- | Job market demand | 148. | 054. | 2.712 | 007. | 146. |
| Job performance <--- | Competency | 351. | 089. | 3.929 | * * * | 353. |
| Job performance <--- | Internship experience | 166. | 044. | 3.774 | * * * | 208. |
| Job performance <--- | Human resource development practice | 438. | 096. | 4.578 | * * * | 392. |

According to the structural equation model path coefficient,

Human resource development practice has a significant positive impact on competency (non-standard path coefficient is 0.857, P < 0.001), and the hypothesis is valid.

Competency has a significant positive impact on internship experience (non-standard path coefficient is 0.483, P < 0.001), and the hypothesis is valid.

Human resource development practice has a significant positive impact on internship experience (non-standard path coefficient is 0.283, P=0.033), and the hypothesis is valid.

The employment market demand has a significant positive impact on internship experience (non-standard path coefficient is 0.148, P=0.007), and the hypothesis is valid.

Competency has a significant positive effect on job performance (non-standard path coefficient is 0.351, P < 0.001), and the hypothesis is valid.

Internship experience has a significant positive effect on job performance (non-standard path coefficient is 0.166, P < 0.001), and the hypothesis is valid.

Human resource development practice has a significant positive impact on job performance (non-standard path coefficient is 0.438, P < 0.001), and the hypothesis is valid.

## 5. Mediation effect test

a represents the coefficient from X to M, b represents the coefficient from M to Y, c represents the total effect from X to Y, and c* represents the direct effect from X to Y.

If $c^* \neq 0$, then M is a partial mediator of X to Y; If c*=0, then M is a complete mediation from X to Y. a*b represents the mediating effect, and the total effect is equal to the sum of the direct effect and the mediating effect, i.e. c=a*b+c*.

The mediation path of this model, "competency => internship experience => job performance", "human resource development practice => internship experience => job performance", is analyzed. As shown in the table:

**Table 7** Mediation effect test

| item | Test conclusion | c Total effect | a | b | a*b mediating effect | c* Direct effect | Effect proportion calculation formula | Effect proportion |
|---|---|---|---|---|---|---|---|---|
| Competency => Internship experience => Job performance | Partial Agency | 0.439 | 0.389 | | 0.081 | 0.358 | a * b / c | 18.451% |
| Human resource development practice => Internship experience => Job performance | Partial Agency | 0.434 | 0.203 | 0.208 | 0.042 | 0.392 | a * b / c | 9.677% |

As can be seen from the above table, $c^* \neq 0$, "competency => internship experience => job performance" and "human resource development practice => internship experience => job performance" are both partial intermediaries.

## Discussion

This study analyzes the multidimensional factors that affect students' human resource employment, revealing the comprehensive impact of abilities, internship experience, human resource development practices, and market demand on students' employment outcomes under the conditions of popularity and employment security. Based on existing literature and theories, the discussion is as follows:

Firstly, competence, as a core factor affecting students' employment, has been fully validated. Research has found a significant positive correlation between students' abilities and their employment outcomes (Jackson, 2014). This result is consistent with Spence's (1973) human capital theory, which emphasizes the signaling role of educational background and abilities in the labor market (Spence, 1973). Enterprises judge whether students have the basic qualities to be competent in their work through ability signals; therefore, students with high-level abilities have an advantage in the fiercely competitive job market (Rothwell & Arnold, 2007). In addition, Brown's (1995) career choice theory also supports the findings of this study, emphasizing that ability is not only a key factor in job success, but also directly

affects students' career development trajectory (Brown, 1995). Therefore, university should not only focus on students' academic performance in the education process, but also cultivate their innovative thinking and teamwork abilities to meet the demand of modern enterprises for versatile talents (Jackson, 2014).

Secondly, the significant impact of internship experience on employment outcomes has been validated, with students with extensive internship experience having significantly higher employment opportunities than those who did not participate in internships (Gault et al., 2000). This finding is consistent with Coco's (2000) research, which showed that students who participate in internships can not only transform the knowledge learned in the classroom into practical abilities, but also accumulate valuable networking resources through internships, thereby improving employment opportunities (Coco, 2000). Internship experience is an important mediating variable in this study. Through internships, students can acquire practical operational skills and establish a good professional image in enterprises, thereby increasing employment opportunities (Divine et al., 2007). Knouse, Tanner, and Harris (1999) also pointed out that graduates with rich internship experience are better equipped to cope with workplace challenges and can adapt to the culture and job requirements of the company more quickly (Knouse et al., 1999). Therefore, encouraging students to participate in high–quality internship projects should be one of the key elements of cooperation between university and enterprises.

Thirdly, Human Resource Development Practices (HRD Practices) have played a significant role in promoting students' career performance in enterprises, especially when implementing systematic training and development plans, students' job performance has been significantly improved (Aguinis & Kraiger, 2009). This finding is consistent with Noe's (2020) human resource development theory, which suggests that companies can effectively enhance employees' job skills and job satisfaction by providing career development opportunities (Noe, 2020). Therefore, enterprises should continue to optimize their human resource management practices and provide more systematic career development plans to attract and retain high–quality talent (Garavan, 2007).

Fourthly, the moderating effect of job market demand has been confirmed in this study. During periods of strong market demand, students' employment opportunities significantly increase (Betts, 1996). As a key factor in the external environment, market demand significantly affects the strength of the impact of abilities and internship experience on employment outcomes (Robst, 2007). This is consistent with the theory of labor supply and demand, indicating that changes in market demand

directly determine the employment rate of students (Borjas, 2010). Robst's (2007) study also suggests that industry market demand has a significant impact on graduates' employment choices and wage levels (Robst, 2007). Therefore, in career planning guidance, university need to encourage students to pay attention to the latest developments in the industry and adjust their career development direction according to market demand.

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In summary, the results of this study not only validate the impact of multidimensional factors on student employment, but also form a strong dialogue with existing relevant literature and theories. This result provides valuable reference for university, businesses, and policy makers, especially in proposing effective strategies on how to enhance students' employment competitiveness.

## Conclusion

This study aims to explore the multidimensional factors that affect students' human resource employment, and examine the relationship between these factors and their impact on students' employment under the conditions of popularity and employment security. Through structural equation modeling (SEM) data analysis, this study has drawn the following main conclusions:

Firstly, the competency of students has been proven to be one of the key factors affecting employment outcomes. According to data analysis, there is a significant positive correlation between ability and employment outcomes. Specifically, students' professional knowledge, innovation ability, teamwork ability, and problem-solving ability demonstrate significant influence in the job search process. Data shows that students with higher levels of ability are more likely to be favored by businesses,

especially in high demand industries such as information technology, finance, and engineering, where these abilities are particularly important. Therefore, improving students' comprehensive abilities will significantly enhance their employment competitiveness.

Secondly, the impact of internship experience on students' employment has also been supported by data. Through internships, students can better apply theory to practice and gain skills and experience related to their future careers, thereby improving employment opportunities. The role of internship experience is particularly prominent in technical positions, and data shows that technology companies tend to choose candidates with relevant internship experience during the recruitment process. This discovery further proves the importance of internship experience for students' career development.

Thirdly, Human Resource Development Practices (HRD Practices) have played a significant role in promoting students' employment performance. By analyzing the correlation between human resource practices in enterprises and student job performance, data shows that companies with comprehensive training systems and career development plans have significantly better employee job performance than those lacking training support. The data also shows that students who have participated in these corporate internship programs have achieved improvements in their job performance. Therefore, the completeness of enterprise human resource management not only contributes to the development of employees, but also directly affects the employment quality of students.

Fourthly, job market demand, as a moderating variable, significantly affects the strength of the impact of ability and internship experience on employment outcomes. Against the backdrop of economic prosperity and strong industry demand, students' employment opportunities have significantly increased. The data shows that during peak market demand, the average employment rate of students increases, while during periods of low market demand, even if students have high abilities and rich internship experience, there are still employment challenges. Therefore, fluctuations in market demand are important external factors that affect students' employment outcomes, and students need to have the ability to flexibly respond to market changes, especially in the context of rapidly changing industry demands.

Finally, job performance is an important indicator for measuring the quality of students' employment. Through the evaluation of students' job performance after entering the workplace, the data shows a significant correlation between abilities and job performance. In addition, internship experience significantly improved job performance, with students who participated in internships scoring

higher on average than those who did not have internship experience after entering the company. Therefore, students' abilities and internship experience not only have an impact on employment opportunities, but also directly determine their long-term development and performance in the workplace.

In summary, based on data analysis, this study concludes that abilities, internship experience, HRD practice, and market demand are key factors affecting students' employment outcomes. The data validated the significant relationship between various variables and provided clear direction for enhancing students' employment competitiveness. university should focus on cultivating students' comprehensive qualities, enterprises should strengthen human resource management, and the government should provide more internship and employment opportunities for students to cope with changes in market demand.

## Suggestions

This study deeply explores the multidimensional factors that affect students' employment in human resources, revealing the comprehensive impact of abilities, internship experience, human resources development practices, market demand, and other factors on students' employment. However, any study has limitations, and this study is no exception. In order to further promote research in this field, this article proposes the following suggestions for future research based on the limitations of existing research.

1. Expanding research scope and sample diversity

This study mainly focuses on higher education students in a specific region. Although the research results have some universality, regional differences may have different impacts on employment outcomes. The economic development level, industrial structure, government policies, and cultural background of different regions may all affect students' employment opportunities and career choices. Therefore, future research should:

Expanding geographical scope: Future research can be conducted in different regions and countries, especially in regions with different levels of economic development, to explore the impact of these differences on employment outcomes. For example, it is possible to compare the employment

markets of developed and developing countries and explore whether the mechanisms of ability and internship experience are the same in different economic environments.

Sample diversity: Future research should increase sample diversity, especially in terms of gender, major, educational background, work experience, etc., to ensure the broad applicability of research results. For example, one can compare the differences in employment paths between liberal arts and science and engineering students, or explore the specific advantages and disadvantages of different genders in job competition.

2. In depth exploration of the quality and long-term impact of internship experience

This study found that internship experience has a significant impact on students' employment outcomes, however, the quality of internship experience may vary greatly across different industries, companies, and student groups. High quality internships not only provide students with practical skills and industry experience, but also promote their career development. However, short-term internships that are unrelated to the profession may not produce significant employment results. Therefore, future research can:

In depth exploration of internship quality: Future research should pay more attention to the measurement standards of internship quality and explore which types of internships are most effective for student employment. For example, studying the specific impact of different forms of internships (such as long-term internships, enterprise oriented internships, cross-border internships, etc.) on students' employment, and how these internships provide assistance for students' long-term career development.

Exploring the Long term Impact of Internship: Currently, most research focuses on the impact of internships on students' short-term employment outcomes, and future research can pay more attention to the impact of internships on students' long-term career development. For example, can internships bring students higher career satisfaction, faster career advancement opportunities, or more stable career development paths?

3. Exploring the impact of technological progress and industrial transformation on the job market

With the rapid development of technology, especially the widespread application of artificial intelligence, big data, and automation technology, the global job market is undergoing profound changes. The demand for positions in traditional industries is gradually decreasing, while the demand for graduates with high-tech abilities in emerging industries is constantly increasing. Therefore, future research should:

Studying the impact of technology on job markets in different industries: Future research can explore the changes in employment demand in different fields due to technological advancements, such as the impact of automation and artificial intelligence on manufacturing, and the high demand for graduates with programming and data analysis skills in the information technology industry. Studying how technology changes job market demand will help students better adjust their career plans.

Exploring the impact of technological literacy on students' employment: Future research can further explore the impact of technological literacy on students' employment competitiveness, especially whether students who can master the latest technologies have an advantage in the job market. With the increasing demand for skills such as data processing, programming, and automation in more and more industries, studying the impact of technological literacy on employment paths has become increasingly important.

4. Further analysis of the relationship between human resource management practices and job satisfaction

The results of this study indicate that human resource development practices have a significant impact on students' employment outcomes, but their long-term effects on job satisfaction have not been fully explored. The human resource management practices of enterprises, such as training, performance feedback, and career development support, not only affect employees' job performance, but may also have a long-term impact on their job satisfaction, organizational commitment, and work motivation. Therefore, future research should:

Exploring the impact of human resource management practices on job satisfaction: Future research can delve deeper into how a company's human resource management practices affect the job satisfaction of new employees, especially for graduates who are new to the workforce, and whether these management practices can enhance their work motivation and long-term willingness to stay.

Analyzing the relationship between workplace culture and employee happiness: Future research can further explore how a company's workplace culture affects the happiness and sense of belonging of new employees, especially in work environments that emphasize collaboration, innovation, and diversity, whether employees are more likely to achieve higher career satisfaction and long-term career development opportunities.

5. Exploring the Impact of Policy Intervention on the Employment Market

This study reveals the important regulatory role of market demand in student employment, however, the role of government policies in promoting the balance and stability of the job market cannot be ignored. Therefore, future research can explore:

The impact of policy intervention on employment outcomes: Future research can analyze how government employment policies, subsidies, and support measures affect students' employment outcomes, especially during economic downturns, and how policy intervention effectively alleviates employment pressure. In addition, research can also explore how government policy support for vocational education promotes a balanced distribution of employment opportunities in different regions and industries.

The impact of regional policies on employment disparities: Different economic development levels and policy environments in different regions may lead to significant differences in employment opportunities. Future research can further explore the role of regional policies in narrowing the employment gap, especially in economically underdeveloped areas, and how policy support can enhance students' employment competitiveness.

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