

JIRSEA-UPM Special

Issue: Vol. 23 No. 1

April 2025

ISSN 1675-6061

<http://www.seairweb.info/journal/index.aspx>

Submission Timeline

Received: 18/02/2025

Revised as per Preliminary

Review: 15/03/2025

Final Revision & Acceptance:

19/04/2025

Publication Date: 30/04/2025

The Relationship Between Employment Preparation And Employment Competitiveness Of College Students In China

Tao Yaxing, Suhaida Abdul Kadir and Nurzatulshima Bte Kamarudin

CITE ARTICLE: Tao. Y., Abdul Kadir, S., and Kamarudin, N. B. (2025). The Relationship Between Employment Preparation And Employment Competitiveness Of College Students In China. *Journal of Institutional Research South East Asia*, 23(1). 296-313

DECLARATION: Articles published in JIRSEA adhere to the declaration clauses that: (1) the article is entirely the researcher(s) original work and responsibility, (2) principles of honesty and integrity throughout the research process, and unless otherwise indicated and properly cited, this declaration encompasses all aspects of the article, including but not limited to text, figures, tables, data, and any accompanying material are observed, (3) there is no conflict of interest with JIRSEA in any form, (4) holding to all required JIRSEA policies of publication ethics and practices conforming to the COPE Principles of Transparency and Best Practice in Scholarly Publishing, (5) copyrights assignment to JIRSEA, whereby it is published online in an open access requirement of Creative Commons 4.0, and (6) is not funded by any party unless otherwise disclosed.



Publisher: SEAIR Secretariat

C/O Suan Dusit Rajaphat University
295 Nakhon Ratchasima Rd, Dusit, Dusit
District, Bangkok 10300, THAILAND
email:seair.info@gmail.com
<http://www.seairweb.info/>

THE RELATIONSHIP BETWEEN EMPLOYMENT PREPARATION AND EMPLOYMENT COMPETITIVENESS OF COLLEGE STUDENTS IN CHINA

Tao Yaxing¹, Suhaida Abdul Kadir^{1*} and Nurzatulshima Bte Kamarudin¹

¹*Faculty of Educational Studies, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia*

*Corresponding email: suhaida@upm.edu.my

ABSTRACT

Employment is fundamental to individuals' livelihoods and significantly influences China's long-term development, social stability, and harmony. The attainment of full employment for the workforce has emerged as a significant metric of a nation's economic success and the welfare of its populace. Many college students prioritize their grades excessively, concentrating on academic performance while overlooking the enhancement of their ideological, moral, and comprehensive abilities, resulting in a deficiency of significant core competitiveness in the job market. This study sought to examine the correlation between employment preparation and employment competitiveness of college students in China. This research was structured as a quantitative correlational study employing the survey method for data collecting. A collection of instruments with three evaluative sections with 32 items by Demographic Information, Employment Preparation Survey and Employment Competitiveness Survey are utilized for the study to 955 respondents. The data underwent statistical methods including descriptive analysis, Pearson correlation analysis, and ANOVA, and independent samples t-test to examine the study themes and hypotheses. This study identified a substantial correlation between employment preparation and employment competitiveness and explored whether the employment preparation of college students is affected by demographic factors. The findings of this study will augment the theoretical framework linking employment preparation and employment competitiveness. This study provides insights to the government for formulating employment policies and aids college students in improving their competitiveness in the labor market.

Keywords: college students, employment preparation, employment competitiveness, higher education, employment policy

1. Introduction

In 2021, there were 9.09 million college graduates, reflecting a year-on-year increase of 350,000. In 2022, this number rose to 10.76 million, marking a year-on-year increase of 1.67 million. By 2023, the total reached 11.58 million, with a year-on-year increase of 820,000 (Ministry of Education China). Consequently, it will require considerable time for the job market to absorb such a substantial influx. The employment of college students has emerged as a significant social issue of considerable significance in contemporary economic development. China's transition from elite to mass higher education has increasingly afforded young individuals the opportunity to pursue advanced studies; however, the resultant demand for employment and the pace of economic development have made it challenging for employers to generate adequate job opportunities in a short timeframe (Leigh, 2024). The disparity between the current employment scenario and the supply of college students remains significant. Employment is being prioritized.

Statistics from the Ministry of Education indicate that the employment rate for regular college graduates has stabilized at approximately 50%, with half of college students unable to secure job annually. Many college students do not even know the current employment situation, or even how to improve their employment competitiveness (Liu et al., 2024). In 2022, the State Council and the Ministry of Education promulgated several pertinent policies, documents, and methodologies regarding employment, including the Notice on Further Enhancing the Employment and Entrepreneurship of College Graduates and Other Young Individuals, as well as the Notice from the General Office of the State Council on Fortifying the Employment of Graduates from Universally Acknowledged Higher Educational Institutions, in addition to numerous local provincial and municipal documents, university publications, and addresses by officials. This indicates that the hiring of college students is increasingly esteemed by the Party and the State. This study will conduct a systematic investigation focusing on college students' employment preparation, employment competitiveness, and their interconnections, aiming to offer significant theoretical and practical insights for the Chinese government in formulating employment policies, for higher education institutions in providing employment guidance, and for students to enhance their employment competitiveness. The specific objectives of this investigation are as follows:

- 1) To identify the relationship between employment preparation and employment competitiveness of college students in China.
- 2) To explore whether the employment preparation of college students is affected by demographic factors.

Thus, the research questions are as follows:

- a) Is there a relationship between employment preparation and employment competitiveness of college students in China?
- b) Is the employment preparation of college students affected by demographic factors?

The study hypotheses are as follows:

H1: There is a significant relationship between employment preparation and employment competitiveness of college students in China.

H2: Employment preparation of college students is affected by demographic factors

The employment of college students is linked to the sustainable and healthy advancement of higher education, the immediate interests of the public, the execution of the strategy to

enhance national strength via talent, and social harmony and stability. The investigation and resolution of the employment issue is especially pressing. Nevertheless, there is a paucity of research regarding the primary determinants influencing college students' employment and the correlation between college students' employment preparation and employment competitiveness in the job market. This study examines the correlation among the college students' employment preparation and employment competitiveness. It aims to systematically investigate these issues to offer a scientific foundation for the Chinese government in formulating employment policies, assist colleges and universities in providing employment guidance, and enable college students to enhance their employment competitiveness.

Consequently, given the prevailing dire job landscape, college students must maintain clarity of thought, acknowledge the work circumstances, and conduct a comprehensive study of their own qualifications; students should endeavor to enhance their employability; preparedness for employment confers a distinct competitive edge. This represents the pressing demands of the contemporary work landscape for college students, as well as the crucial factor in addressing the issue of college employment.

2. Literature Review

2.1. Employment Preparation

NACE (2022) describes employment preparation as the essential process of cultivating the key competencies required to prepare college-educated individuals for success in the workforce and the management of lifelong careers. Employment preparation encompasses the competencies necessary for individuals to secure, maintain, or progress in employment (Conley, 2012). In recent years, schools have encountered escalating expectations from industry and government to ensure that students possess employable skills and are prepared for the labor market (Mahon, 2022).

This study aims to examine the dimensions of employment preparation according to the six correlates of employment preparation identified by Qikai (2010). The first component is self-perception, which entails introspection, wherein one contemplates own desires, identifies inherent strengths, and discovers individual interests. Goal planning entails identifying professional objectives, systematically categorizing job aspirations both vertically and horizontally and establishing the targets to pursue, the trajectory of employment, as well as the geographical area of employment. Career knowledge structure refers to the necessity for students to thoroughly acquire professional knowledge and proactively comprehend the developmental trajectory of their field and the building of career-related expertise. Social practice experience pertains to students' capacity to engage in diverse college and class activities, oversee student organizations, serve as class officers, or possess part-time employment experience. Employment policy information pertains to students must consistently access internet resources to remain informed about work opportunities, gather insights from educators, and attend relevant lectures, thereby maximizing their understanding of employment policy information and strategy. The final component, employment strategy, pertains to students must carefully consider the needs of the job market, as well as understand the employment policies of relevant countries and grasp the current domestic employment situation.

Contemporary graduates encounter a fiercely competitive entry-level employment market, as businesses across all sectors seek "job-ready" candidates. There exists an implicit expectation that graduates would engage in all aspects of their education during their studies, rather than solely focusing on attaining a final grade (Spanjaard et al., 2018). Employment preparation

should not be confined to the final year of college but should be integrated throughout the entire academic experience. Preparation for employment occurs not only during the final academic year of college but throughout the entire course of education. From the perspective of content and requirements, the employment preparation of college students primarily encompasses psychological readiness, comprehensive quality and skill development, which further includes foundational qualities and skills, professional competencies, and specialized abilities.

Employment preparation serves as a fundamental basis for exhibiting essential core competencies that adequately equip college graduates for success in the workplace and ongoing career management (Webber et al., 2024). Employment preparation has eight dimensions: fundamental skills, cognitive abilities, personal attributes, resource allocation, interpersonal competencies, information literacy, systems administration, technology (Espinosa, 2023). Employment preparation comprises three essential skill domains: academic skills, employability skills, and technical skills. Academic talents refer to the capacity to utilize fundamental academic knowledge in practical contexts, including professional environments and everyday life. Employability skills are essential competencies required for the 21st-century economy (Butler, 2024).

2.2. Employment Competitiveness

Fugate et al. (2004) and Liu (2017) define employment competitiveness as an individual's capacity to recognize and seize professional chances both within and beyond the company during their career. Xu and Gao (2008) asserted that the employment competitiveness of college students denotes an ability developed via the holistic cultivation of professional knowledge and practical skills during their academic tenure. This capability not only enables individuals to achieve their career aspirations and satisfy employer requirements but also facilitates the recognition of their societal value via competition.

Zhou (2022) identified four key components of employment competitiveness to evaluate its dimensions. Ideological and moral quality refers to the consciousness of responsibility, professional dedication, teamwork, and employment concepts. Job skills include interpersonal skills, communication and expression skills, teamwork skills, learning and innovation skills, comprehensive application of knowledge, hands-on skills, organization and management skills, analysis and problem-solving skills. Psychological quality can be reflected in frustration tolerance, adaptability and trial mentality. professional technical includes professional knowledge, professional skills, information literacy and scientific research ability. Ideological and moral quality, job skills, psychological quality belongs to the quality and ability outside the profession, also known as "non-professional quality".

Employment competitiveness refers to graduates' capacity to outshine peers, navigate job challenges, and secure appropriate positions that reflect and actualize their value, specifically their ability to fulfill societal and employer demands for talent during the job selection process (Lu & Li, 2020). Employment competitiveness, as defined by the International Labor Organization, refers to the capacity of individuals to secure and retain employment, advance in their careers, and adapt to changes in their professional circumstances (Jiang et al., 2017).

Employment competitiveness refers to an employee's possession of talents that are in demand and seen appealing by the labor market and employers (Pan, 2022). Employers assess not only the individual knowledge, skills, and character of college graduates amidst intense employment competition, but also the alignment between the objectives of talent development in higher education institutions and societal demands, as well as the efficacy of diverse

educational strategies and methodologies employed by these institutions to achieve their talent cultivation goals (Mengxue, 2022).

2.3. Career EDGE Employability Model

Researchers use the Career EDGE employability model to conduct empirical research on work and employability because it supports the clarification of the determinants of employability. This model focuses on the development of students in higher education. There is evidence that Career EDGE has advantages over other models, namely USEM, the course provider model and Skills for Employment (Wujema et al., 2022), in terms of complex problem solving and research support.

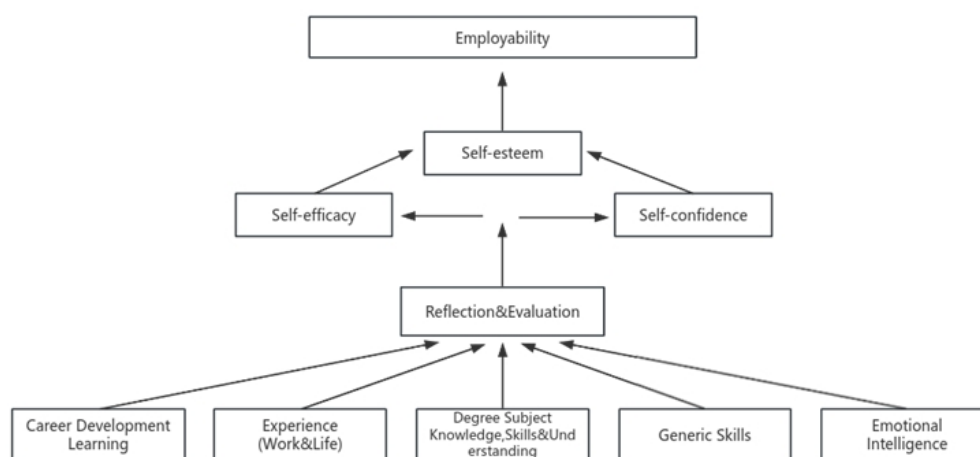


Figure 1: The Career EDGE Employability Model

According to the Career EDGE theory, the original lower part includes five level indicators: career development learning, work and life experience, knowledge and skills, general skills and emotional intelligence. It was combined with the upper level of “self-esteem, self-confidence and self-efficacy” and merged into the personal quality level one indicator, which consists of six level one indicators in total. After collecting and organizing the indicators, a team of experts was organized to delete the energy scale and determine the initial employment competitiveness survey during this group discussion. Employment competitiveness includes four dimensions which are ideological and moral quality, professional technical, job skills, psychological quality.

2.4. Demographic factors

Demographic factors pertain to individual characteristics, including age, gender, academic performance, and residence background (Oanda & Akudolu, 2010). A significant positive correlation exists between the demographic factors of college students and their employment preparation, particularly as students with superior personal qualities demonstrate improved employment preparation, greater adequacy in employment preparation, and heightened competitiveness in the labor market. Student leadership, policy information preparation, and residential background significantly influence employment chances, accounting for 19.9% of the explanatory variance (Qikai, 2010).

Gender is a significant demographic determinant of employment for graduates (Artess et al., 2008). The study revealed that male graduates typically have a favorable income disparity and

superior employment opportunities relative to their female counterparts (Artess et al., 2008). Foreign language proficiency has been identified as a critical factor influencing graduate employability (Dabalen et al., 2001). Lim (2010) noted that strong English language ability confers a significant advantage in university studies, job applications, positively influences employment rates, and diminishes the duration of unemployment. Demographic factors in this study included gender, academic performance, residence background, foreign language proficiency, student leadership experience and scholarship status.

2.5. Research Framework

The research would be better understood if the conceptual framework accurately represents the established constructs. The examination and comprehension of the relationship between variables will contribute to the advancement of theories and knowledge, which is the primary objective of any research endeavors (Bagobiri et al., 2015). This study's framework illustrates the relationship between the dependent variable (Employment Competitiveness) and the independent variable (Employment Preparation) concerning demographic factors. It is based upon the influence of employment preparation to determine the degree of employment competitiveness. Figure 2 explained the research framework of the study.

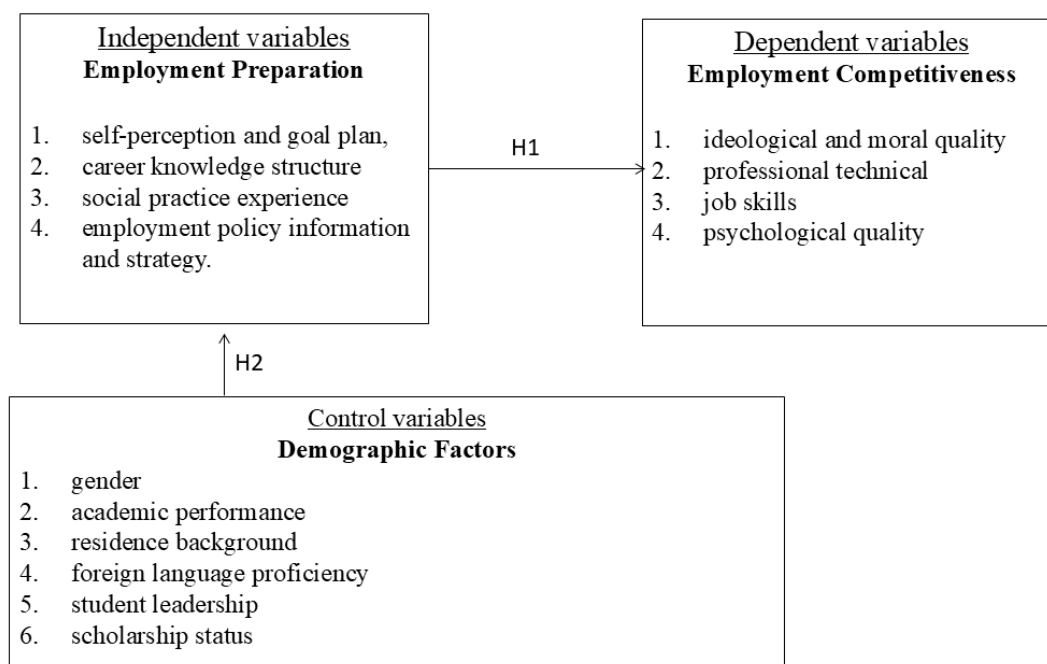


Figure 2: Research Framework

3. Methodology

3.1. Research Design

This study employed a correlational research strategy for quantitative analysis. Quantitative research is employed to address inquiries regarding the links among measured variables to elucidate, forecast, and regulate occurrences. Correlational research allows researchers to evaluate the nature and extent of the relationship between independent and dependent variables without manipulating them (Moshood, 2021). It is descriptive as it produces data that may be employed to delineate the variables under investigation.

This study mainly employs a questionnaire survey method. The employment preparation

questionnaire is derived from Qikai (2010) instrument, whereas the dimensions of employment competitiveness are based on the Career EDGE model. A total of three experts conducted an evaluation using the Delphi method and developed the employment competitiveness questionnaire based on their feedback. SPSS 26.0 was used to assess reliability and validity, conduct exploratory factor analysis, and perform T-tests on the data.

3.2. Population and Sampling

An important step in obtaining an appropriate sample size was to identify the study population. The study population was college students from the top three universities in Guizhou province, mainly junior and senior students. Before the formal survey, pre-test screening questions were conducted on a small sample of 50 students and finally formed a compiled a formal questionnaire and conducted a survey on 1002 college students. 955 valid questionnaires were collected, with an effective recovery rate of 95.3%.

The selection technique employs stratified random sampling, a type of probability sampling. Probability sampling guarantees that each element possesses an equal likelihood of selection (Talebloo, 2015). In this study, a proportionate stratified random sample was used. Furthermore, Ary et al. (2013) stated that the sample in a stratified random sample can be selected of the same size in each subgroup. The researchers chose top three schools to comprehensively represent the entire district. The stages of the sampling process are described below:

- i. The experts identified the three leading schools in Guizhou Province. The objective is to disseminate 1,000 questionnaires, with each school distributing 334 questionnaires. 3 multiplied by 334 equals 1002.
- ii. Two hundred thirty-four students were randomly chosen from each school to participate in the survey.

3.3. Research Instrument

The questionnaires were distributed to college students in Guizhou Province through printed paper copies and the online Questionnaire Star App. The questionnaire was used as a tool for data collection. The questionnaire consisted of two parts. The first part covered the demographic data of the respondents, including gender, academic performance, residence background, foreign language proficiency, student leadership experience and scholarship status. The second part contained two questionnaires. the two surveys assessed variables related to college students' employment preparation survey and employment competitiveness survey questionnaire.

Employment Preparation Survey is used to measure EP variables. 16 items were utilised to gather data on the employment preparation, as developed by Qikai (2010).

The instrument covers six dimensions: self-perception, goal planning, career knowledge structure, social practice experience, employment policy information, and employment strategy. The factor analysis was redefined into four dimensions respectively as career knowledge structure, self-perception and goal planning, salary status and family background, and social practice experience.

The Career EDGE theory adopted in this study originates from a foreign context and has been relatively underexplored in domestic academia, existing questionnaires could not be directly applied. Therefore, a process of localization was necessary to adapt the questionnaire for this study. The construction of this part of the scale mainly adopts the survey and statistical

methods. The literature was analyzed and organized based on a comparison of existing literature. Through group discussion and expert group demonstration, Delphi questionnaire was issued, collected and SPSS26.0 statistical analysis was carried out. Employment competitiveness has 10 items and includes four dimensions which are ideological and moral quality, professional technical, job skills, psychological quality.

Employment Preparation Survey and Employment Competitiveness Survey consisted of 26 items and used a 5-point Likert scale ranging from 1 (very poorly matched) to 5 (very matched). All elements on the scale were positive and using a range from "1= very poorly matched ", "2= poorly matched ", "3= Neutral ", "4= matched " and "5= very matched ".

3.3.1. Reliability of the Instruments

In the present study, Cronbach's Alpha (α) serves as a reliability metric to evaluate the instrument's dependability. Reliability analysis is conducted by assessing the internal consistency and stability of items categorized under a specific factor. A Cronbach's Alpha coefficient nearing 1 signifies enhanced internal dependability of a research instrument. Researchers often consider an alpha of .7 to be the minimum acceptable coefficient alpha (Hair et al., 2017). A reliability coefficient nearing 1.0 denotes enhanced perceived reliability, indicating superior internal accuracy (Suresh & Chandrashekara, 2012).

Reported in Table 1, Employment Preparation has six dimensions, all exceeding .70 in reliability, except for career knowledge structure and social practice experience, which exhibit moderate reliability. The four dimensions of Employment Competitiveness all score .90 or higher, indicating that the questionnaire items in this study are well-constructed and that the study possesses substantial practicality.

Table 1: The Result of Reliability Test for Employment Preparation and Employment Competitiveness

Variables	Cronbach Alpha
Employment Preparation (EP)	.903
EP- self-perception	.825
EP- goal planning	.711
EP- career knowledge structure	.673
EP- social practice experience	.667
EP- employment policy information	.810
EP- employment strategy	.845
Employment Competitiveness (EC)	.735
EC-Ideological and moral quality	.958
EC-Professional Technical	.962
EC- Job skills	.933
EC- Psychological quality	.963

3.3.2. Validity

Validity refers to the accuracy, relevance, and validity of the researcher's conclusions derived from the gathered data (Fraenkel et al., 2012). If the validity of an instrument is in question, it is not possible to interpret the data. To assess the efficacy of the created questionnaire in

accurately representing the issue, Kaiser-Meyer-Olkin (KMO) and Bartlett's sphericity test can be employed to ascertain its appropriateness for factor analysis, with an evaluation of the questionnaire's validity.

The KMO value of the sample must be assessed to ascertain its suitability for factor analysis. The KMO value is considered appropriate for factor analysis if it exceeds 0.9; a number between 0.8 and 0.9 indicates strong suitability; a range of 0.7 to 0.8 suggests that factor analysis is feasible, while a value below 0.7 is deemed unsuitable for factor analysis. The importance of Bartlett's test of sphericity is assessed by determining if the p-value is less than 0.05; if it is, the test is deemed appropriate, and if not, it is unsuitable.

As can be seen from the following Table 2, the KMO value for the service quality scale is 0.948, indicating that the sample data is very suitable for factor analysis and has high validity. In addition, the significance probability of Bartlett sphere test is significantly less than 0.05, indicating that the sample data are relevant and suitable for factor analysis, and the validity is high.

Table 2: KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.948
Bartlett's sphericity test	The approximate chi-square	8466.72
	df	120
	Sig	.000

3.3.3. Factor analysis

The principal component method was used to extract factors, and common factors that met the study's requirements were retained. As can be seen from Table 3, the 16 items were reduced to 4 dimensions by factor analysis, so the next analyses involved reclassification, defining A11-A22 as self-perception and goal plan, B11-B12 as career knowledge structure, B13-B22 as social practice experience, and C1-D3 as employment policy information and strategy.

Table 3: Validity Analysis Results

Title	Factor loading			
	1	2	3	4
A11 I did a comprehensive analysis of my own advantages and disadvantages for employment		.735		
A12 I have analyzed my interests and strengths for employment		.772		
A13 I took personality tests and career orientation tests for employment		.727		
A21 Determined their own career goals for employment, including employment direction and employment area		.658		
A22 I made a detailed employment plan for employment		.569	.568	
B11 Develop your ability to resist setbacks				.761
B12 Enhance my professional knowledge and skills				.735
B13 My major is in high demand and good employment in the job market			.741	
B21 I got some training and experience in the club			.582	
B22 I often work as a part-time intern in government enterprises or other units and have rich off-campus practical experience			.728	
C1 For employment often read the relevant national employment policy	.431		.682	
C2 Analysis of the professional employment situation in the market for employment	.547		.469	
C3 During the job hunting period, I actively participated in various job fairs or Internet recruitment	.739			

D1 Before applying for a job, I carefully prepared a resume that could distinguish me	.748			
D2 I learned about the etiquette of job hunting and some things to be aware of when applying for a job	.738			
D3 I took the initiative to accumulate experience in interviews and written tests	.738			

3.4. Data Collection Procedure and Analysis

Information and research data were gathered from the respondents using questionnaires. Respondents who were undergraduate students at the chosen universities received the questionnaire via the online questionnaire star app and the paper version of the questionnaire. Prior to data collection, an application for permission to conduct research in each college was made. The contact information of the undergraduate students in each college was obtained. First, the researchers went to schools to distribute paper versions of the questionnaire to classes of college students. Some students in some classes have already gone to work as interns. We obtained the students' contact information by contacting the counselor and sent the link to the questionnaire APP via email for them to fill in. The survey was anticipated to require 20-25 minutes for completion. Furthermore, students were notified that their participation in this study was voluntary and that their replies would be kept anonymous and confidential. The data underwent statistical methods including descriptive analysis, Pearson correlation analysis, ANOVA, and independent samples t-test.

4. Findings

4.1. Demographic of Respondents and Descriptive Findings

This study distributed 1,002 questionnaires to university students in Guizhou Province, obtaining 955 valid responses, resulting in an effective response rate of 95.3%. Table 4 presents the demographic characteristics of these 955 students, including gender, academic performance, residence background, foreign language proficiency, student leadership experience, and scholarship status.

Table 4: Summary of Demographic Information of the Respondents

Demographic variable	Profile	Frequency	Percentage
Gender	Male	381	39.9
	Female	574	60.1
Have you ever served as a student leader	No	529	55.4
	Yes	426	44.6
Have you ever received a scholarship	No	402	42.1
	Yes	553	57.9
Academic performance	Outstanding	53	5.5
	Good	512	53.6
	Medium level	324	33.9
	Not good	58	6.1
	Poor level	8	.8
Residence Background	Province and city	168	17.6
	Counties and towns	258	27.0
	Countryside	527	55.2
	Deficiency	2	.2
Foreign language proficiency	TEM-8 or above	6	.6
	TEM-4	33	3.5
	National level 6	72	7.5
	National level 4	361	37.8
	Below level 4	483	50.6

From the above Table 4, it can be seen that there are 381 male students, accounting for 39.9% of the total, and 574 female students, accounting for 60.1% of the total.

4.2. Relationship between Employment Preparation and Employment Competitiveness

The relationship's strength was assessed utilizing Cohen (1988). The scope of the understanding of the link is elucidated below.

$r = -0.10$ to -0.29 and $+0.10$ to 0.29 is rated as Low correlation;

$r = -0.30$ to -0.49 and $+0.3$ to $+0.49$ is rated as Medium correlation;

$r = -0.50$ to -1.00 and $+0.50$ to $+1.00$ is rated as High correlation.

This study seeks to examine the correlation between employment preparation and employment competitiveness, employing the Pearson correlation test to evaluate hypothesis 1. Table 5 presents the correlation results among the test variables.

Table 5: Correlation between Employment Preparation and Employment Competitiveness

Variables	r	p	Level
Employment Competitiveness (Y)			
self-perception and goal plan	.607**	.000	high
career knowledge structure	.685**	.000	high
social practice experience	.628**	.000	high
Employment policy information and strategy	.631**	.000	high
Overall	.532**	.000	high

** . Correlation is significant at the 0.01 level(2-tailed). Y=Dependent Variable Level.

Pearson correlation coefficient was applied to test the relationship between overall and sub-dimensions of employment preparation and employment competitiveness and the results reported that $r=.532$ ($p=.000$). This indicates that there is a highly positive correlation between employment preparation overall and employment competitiveness. Therefore, research hypothesis H1 is accepted. The employment preparation sub-dimensions are also highly positively correlated with employment competitiveness, with the highest being structure ($r=.685$; $p=.000$), followed by employment policy information and strategy ($r=.631$; $p=.000$), social practice experience ($r=.628$; $p=.000$) and finally self-perception and goal planning ($r=.607$; $p=.000$).

4.3. ANOVA and Independent Samples t-Tests on Differences in Employment Preparation Across Demographic Factors

Male students outperform female students in employment preparation, with a significance value over 0.05 for the chi-square test. If only the effect of single factor of gender is considered, F is 8.98 and p is 0.003, since p is less than 0.05, it means that different gender has significant effect on the mean value of employment preparation (Table 6). The same ANOVA was used to derive a positive correlation between academic performance and employment preparation with a p greater than 0.05 for chi-square. If only the effect of single factor of academic performance is considered table F value is 12.50 and p is 0.000 since p is less than 0.05, so it shows that different academic performance have a significant effect on the mean value of employment preparation.

Table 6: ANOVA Results for the Effects of Demographic Factors on Employment Preparation

Demographic Variable	Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Gender	Between Groups	4.62	1	4.62	8.98	.003
	Within Groups	487.34	948	.51		
	Total	491.96	949			
Academic performance	Between Groups	24.72	4	6.18	12.50	.000
	Within Groups	467.24	945	.49		
	Total	491.96	949			

Additionally, Table 7 shows that the residence background significance P is less than 0.05 for non-uniformity. Welch's method P is 0.000, corresponding to a probability P-value of 0.000. If the significance level α is 0.05, the original hypothesis should be rejected that different regions have a significant impact on the mean value of employment preparation, since P is less than the significance level α . Brown-Forsythe's method P is 0.000, corresponding to a probability P value of 0.000. If the significance level α is 0.05, since P is less than the significance level α , the original hypothesis should be rejected that different regions have a significant impact on the mean value of employment preparation, and that there is a significant difference between rural areas and provinces and cities, and between rural areas and counties and towns.

Table 7: Bond Strength Test for Mean Differences

Demographic Variable	Sig	Statistic	Levene Statistics	DF1	DF2	Sig
Residence background	.019	Welch	8.15	2	399.05	.000
		Brown-Forsythe	8.20	2	548.28	.000
Foreign language proficiency	.009	Welch	21.29	4	32.94	.000
		Brown-Forsythe	19.35	4	60.38	.000

a. Asymptotic F distribution

Using the same analysis of variance method, the foreign language level P is less than 0.05, which indicates non-uniformity. Welch method P is 0.000, which corresponds to a probability P value of 0.000. If the significance level α is 0.05, the original hypothesis should be rejected that there is a significant effect of different levels of English on the mean value of employment preparation, since P is less than the significance level α . Brown-Forsythe Method P is 0.000, which corresponds to a probability P-value of 0.000. If the significance level α is 0.05, the hypothesis should be rejected since P is less than the significance level α . The hypothesis should be rejected that the level of foreign language has a significant effect on the mean value of employment preparation. Tables 8 and 9 show the independent t-test analysis of students' employment preparation by student leadership experience.

Table 8: Group Statistics

	Have served	N	Mean	Std. Deviation	Std. Error Mean
Employment preparation	Unselected	529	2.97	0.73	0.032
	Selected	426	3.26	0.68	0.033

Table 9: Independent Samples T-test for Employment Preparation by Student Leadership Experience

Levene's Test for Equality of Variances		t-test for Equality of Mwans						
		F	Sig.	t	df	Sig.(2-tailed)	Mean Difference	Std. Error Difference
Employment preparation	Equal variances assumed	4.06	0.044	6.32	948	0	0.29	0.046
	Equal variances not assumed			6.37	927.68	0	0.29	0.046

An independent samples t-test was conducted to compare scores between whether students have been a student leader or not. Results indicated that those who have served ($M = 3.26$, $SD = 0.68$) scored significantly higher than those who have not ($M = 2.97$, $SD = 0.73$), $p = .044$, which is less than 0.05 (see Table 10 and Table 11). This indicate that there is a substantial difference between individuals who have served as student leaders and those who have not, as seen by the variance inequality being zero.

Table 10: Group Statistics

	Have received	N	Mean	Std. Deviation	Std. Error Mean
Employment preparation	Unselected	402	3.01	0.67	0.029
	Selected	553	3.29	0.75	0.038

Table 11: Independent Samples t-Test for Employment Preparation by Scholarship Status

Levene's Test for Equality of Variances		t-test for Equality of Mwans						
		F	Sig.	t	df	Sig.(2-tailed)	M D	Std. Error Difference
Employment preparation	Equal variances assumed	9.33	0.002	6.04	948	0	0.28	0.046
	Equal variances not assumed			5.93	800.53	0	0.28	0.047

An independent samples t-test was conducted to compare scores between whether students have received scholarships or not. Results indicated that those who have received ($M = 3.29$, $SD = 0.75$) scored significantly higher than those who have not ($M = 3.01$, $SD = 0.67$), $p = .002$, which is less than 0.05, indicates that there is a substantial difference between those who have received scholarships and those who have not, as seen by the variance inequality being zero.

5. Discussion

This study sought to examine the correlation between employment preparation and employment competitiveness of college students in China. There is a significant relationship between employment preparation and employment competitiveness.

5.1. Relationship between Employment Preparation and Employment Competitiveness

Utilizing the Pearson correlation test to analyze the relationship between college students' employment preparation and their employment competitiveness. The results indicated a substantial positive link between employment readiness and employment competitiveness ($p < 0.05$), with a higher degree of correlation seen (Qikai, 2010). The self-perception of employment preparation and employment policy information and strategy dimensions were moderately correlated with employment competitiveness ($r = .471$ and $r = .424$) respectively. The career knowledge structure of employment preparation was associated with employment competitiveness ($r = .049$) (T., 2009).

Every aspect of employment preparation positively influences all facets of employment competitiveness. There is a significant positive correlation between social practice experience under the specific dimension of employment preparation ($r = 0.661$) and employment competitiveness. Although, social practice in employment preparation has the least impact on employment competitiveness, it is also high correlation with employment competitiveness (Jia, 2023). Consistent with the current findings, social practice experience is highly correlated with employment competitiveness

5.2. Employment Preparation Of College Students Is Affected By Demographic Factors

Employment preparation and employment competitiveness are all positively correlated with the demographic factors of participants, including gender, academic performance, residence background, foreign language proficiency, and student leadership experience and scholarship status. The juniors and seniors are the main objects of this survey. Although the majority of the respondents were female, male students outperformed female students in terms of employment preparation. In terms of employment preparation, students who have served as student leaders are better than those who have not. Similarly, those who have received scholarships are better prepared for employment than those who have not.

The correlation research reveals a significant relationship between college students' demographic factors and their overall employment competitiveness score. Gender, academic performance, and Residence background exhibit a negative correlation with employment competitiveness. The subject nature, whether the student is a student leader, foreign language level and employment competitiveness are significantly positively correlated (Qikai, 2010). Dodd et al. (2022) investigated the correlation between career advice interventions and employment preparation. The findings demonstrated that age exerted a substantial direct influence on employment preparation ($\beta = .1374$, $SE = .0683$, $p = .04$). Research indicates that individuals become increasingly prepared for their careers as they mature. Parietti et al. (2016) investigated the employment preparation of student-athletes, emphasizing gender -based disparities. Female exhibited a markedly greater necessity for self-awareness. Moreover, this is significant as the study indicates that girls appear to lack confidence in their employment preparation and vocational competencies.

6. Implications of the Study

This research theoretically enhances the relevant theories concerning employment issues in China. Simultaneously, it employs literature analysis and questionnaire surveys to examine the characteristics of college students' employment preparation, employment competitiveness, and their interrelation, thereby broadening the scope of employment problem studies.

The investigation into college students' employment preparation, employment competitiveness, and their interrelation can assist graduates in understanding the mechanisms that elevate employment planning awareness, facilitate effective preparation, enhance competitiveness, and influence overall employability. This research also offers critical insights for improving employment competitiveness and holds significant practical implications for the advancement of employment promotion policies and guidance within Chinese higher education institutions. This is highly relevant for the development of employment promotion policies and initiatives, as well as for enhancing employment guidance in higher education institutions.

7. Conclusion and Recommendations

This quantitative study investigates the correlation between employment preparation and employment competitiveness. This study produces significant findings that address the knowledge and research deficiencies concerning employment preparation and employment competitiveness of college students in China. The research findings have resulted in the following conclusions: The results demonstrated that Pearson's correlation analysis revealed favorable relationships between employment preparation and employment competitiveness. This research indicates that improved opportunities for students' employment preparation and higher employment readiness lead to increased employment competitiveness.

The results indicate that all four dimensions of employment preparation exhibit a strong correlation with employment competitiveness; however, the correlation between self-perception and goal plan and employment competitiveness is the weakest among the four dimensions. This suggests that students should conduct a thorough analysis of their vocational values and career orientation, as some college students do not adequately consider how to align their interests and strengths with their career planning. The dimension of career knowledge structure in employment preparation exhibits the strongest correlation with employment competitiveness, signifying a profound mastery of professional skills and a consistent high level of motivation to learn; the second highest correlation pertains to employment policy information and strategy. Students with high employment competitiveness are typically highly aware of the job market's supply and demand dynamics, possess a thorough understanding of pertinent national employment policies, and have conducted in-depth analyses of the industries or specific companies they wish to pursue. Furthermore, there is the experience of social practice. It is recommended that college students participate in club activities and off-campus internships while in school (King et al., 2021).

Comparative analysis of fundamental demographic factors indicates that college students with robust employment policy information and strategy typically also demonstrate excellence across all domains. They have typically been student leaders, obtained scholarships, possess proficiency in foreign languages, and have outstanding academic success. Secondly, except for objective reasons such as gender and residence background which we cannot change, all other demographic factors are positively correlated with employment preparation. Therefore, college students can enhance their employment preparation through these attributes, and they should approach their studies with seriousness, focusing on the accumulation of knowledge and experience. Schools should provide comprehensive and effective training for college teachers and carry out comprehensive and effective employment guidance for college students, so as to change the concept of employment of college students, increase their employment initiative, prepare them for employment, and enhance their competitiveness in employment.

A potential limitation of this study is the adequacy of the measurement items for employment preparation and employment competitiveness. Although both constructs consist of four

dimensions and a total of 26 items, the limited number of items per dimension may not be sufficient to fully capture the complexity of each component, potentially affecting the validity and depth of the findings. Lang (2009) suggests that the main factor restricting the employment competitiveness of college students in China is that China's industrial upgrading has not yet been completed, and that college students are in the downstream of the industrial chain for a long period of time, resulting in insufficient demand for college students' labor. Due to the limited time and energy, this study did not explore the influencing factors of college students' employment competitiveness from the perspective of economics.

References

- Artess, J., Ball, C., & Mok, P. (2008). Higher degrees: Postgraduate study in the UK 2000/01 to 2005/06. *Higher Education Careers Service Unit (HECSU)*, http://www.bis.gov.uk/assets/biscore/corporate/migratedd/publications/d/dius_rr_08_16.pdf
- Ary, D., Jacobs, L. C., Sorensen, C., & Walker, D. (2013). Introduction to research in education: Cengage Learning. *Journal of Correctional Education*, 9-22.
- Bagobiri, G., Asimiran, S., & Basri, R. (2015). Relationship between principals' leadership attributes and school effectiveness in Niger state secondary schools, Nigeria. In *National Research & Innovation Conference for the Graduate Students in Social Sciences 2014*.
- Butler, V. C. (2024). *An examination of college and career readiness in adult education programs in South Carolina*. South Carolina State University.
- Conley, D. T. (2012). A Complete definition of college and career readiness. *Educational Policy Improvement Center (NJI)*.
- Dabalén, A., Oni, B., & Adekola, O. A. (2001). Labor market prospects for university graduates in Nigeria. *Higher Education Policy*, 14(2), 141-159.
- Dodd, V., Hanson, J., & Hooley, T. (2022). Increasing students' career readiness through career guidance: measuring the impact with a validated measure. *British Journal of Guidance & Counselling*, 50(2), 260-272.
- Espinosa, V. (2023). *A Study of the relationship of students' leadership style and career readiness at technical colleges*. Our Lady of the Lake University.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (Vol. 7). McGraw-hill New York.
- Hair, J. F., Celsi, M. W., Ortinau, D. J., & Bush, R. P. (2017). *Essentials of marketing research*. McGraw-Hill.
- Jia, X. (2023). *The influence of career adaptability and employment preparation on the employment quality of postgraduate students*. East China Normal University.
- Jiang, L., Li, Y., & Jiang, C. (2017). Employment competitiveness of college students based on improved AHP. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(8), 5225-5232.
- King, A. E., McQuarrie, F. A., & Brigham, S. M. (2021). Exploring the relationship between student success and participation in extracurricular activities. *SCHOLE: A Journal of Leisure Studies and Recreation Education*, 36(1-2), 42-58.
- Leigh, N. G. (2024). *Planning local economic development: Theory and practice*. SAGE publications.
- Liu, J., Li, J., Jia, C., Li, Y., & Wang, Q. (2024). Survey and research on enhancing the employment competitiveness of college students. *Frontiers in Business, Economics and Management*, 14(3), 274-277.

- Lu, Y., & Li, J. (2020). Paths for improving employment competitiveness of students with financial difficulties at China's border higher institutions. *Journal of Physics: Conference Series*.
- Mahon, D. (2022). The role of graduate attributes in higher education. A review of the issues associated with graduate attributes and the case for their measurement. *Interchange*, 53(3), 353-369.
- Mengxue, B. (2022). *Study on the employment competitiveness of Yanching Institute of Technology graduates in Hubei province under the new situation*. Siam University.
- Moshood, Y. A. (2021). *Interrelationship between principals' transformational leadership style, teachers' job satisfaction, and school effectiveness in secondary schools of Lagos State, Nigeria*. Universiti Putra Malaysia.
- Oanda, I., & Akudolu, L. (2010). Addressing gender inequality in higher education through targeted institutional responses: Field evidence from Kenya and Nigeria. *Higher education in Africa; equity, access opportunity. Institute of International education (IIE)*.
- Pan, S. (2022). The impact of physical appearance on employment competitiveness. In *2021 International Conference on Social Development and Media Communication (SDMC 2021)*.
- Parietti, M., Lower, L., & McCray, K. (2016). The career readiness of intercollegiate athletes: Is there a gender gap? *Journal of Issues in Intercollegiate Athletics*, 9(1), 16.
- Qikai, W. (2010). *Relationship between college students' employment planning consciousness, employment preparation and employment competitiveness*. Chongqing University.
- Spanjaard, D., Hall, T., & Stegemann, N. (2018). Experiential learning: Helping students to become 'career-ready'. *Australasian Marketing Journal*, 26(2), 163-171.
- Suresh, K., & Chandrashekara, S. (2012). Sample size estimation and power analysis for clinical research studies. *Journal of human reproductive sciences*, 5(1), 7-13.
- T., D. (2009). *The relationship between subjective cognition, Employment readiness and Employment of College graduates*. Hunan Normal University.
- Talebloo, B. (2015). *Transformational leadership, organizational citizenship behaviour and school effectiveness in primary schools, Selangor, Malaysia*. Universiti Putra Malaysia.
- Webber, K. L., Stich, A. E., Grandstaff, M., & Case, C. (2024). Benefits of work-related experiences and their impact on career competencies for STEM students. *Journal for STEM Education Research*, 1-24.
- Wujema, B. K., Mohd Rasdi, R., Zaremohzzabieh, Z., & Ahrari, S. (2022). The role of self-efficacy as a mediating variable in CareerEDGE employability model: The context of undergraduate employability in the north-East region of Nigeria. *Sustainability*, 14(8), 4660.
- Xu, Y. J., & Gao, Q.Y. . (2008). Analyzing the basic elements of college students' employment competitiveness. *Heilongjiang Higher Education Research*, 04, 108-110.
- Zhou, F. (2022). [Retracted] Construction of model to enhance college students' core competitiveness from perspective of employment competition through IoT apps. *Wireless Communications and Mobile Computing*, 2022(1), 7472342.